Starline®
A brand of legrand®

Track Busway Product Selection Guide

T3-T5 METRIC & GLOBAL SYSTEMS

T3-T5 SERIES

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T3 SPECS & INTRODUCTION

SPECS

This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway or busway). The system shall be designed primarily for overhead distribution of electrical power; supporting designated work areas and equipment. Once installed, the busway will provide a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

Track Busway shall be designed and manufactured to the following standards:
IEC 61439-1, 61439-6
CCC GB7251.1-2013
CCC GB7251.6-2015
CSA C22.2 No. 27
NMX-J-148-1998-ANCE
UL 857, Ed. 13
Low Voltage Directive - 2014/35/EC
RoHS Directive - 2011/65/EU

*All standards and certifications available upon request

INTRODUCTION

Starline is the leader in electrical power distribution in the mission critical, commercial and light industrial industries with Starline Track Busway. This system was designed to meet the rugged specification of IEC 61439, General Rules & Busway Trunking Systems, with the flexible features of track lighting - and is available in systems with 160 & 225 amps with case, dedicated or isolated earth.

Track Busway is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

The Product Selection Guide was developed to help the design engineer understand and consider all of the options available with Starline Track Busway when designing a system.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at 1-800-245-6378 or email us at info@starlinepower.com. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reseves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at **downloads.starlinepower.com**.

T3 SERIES

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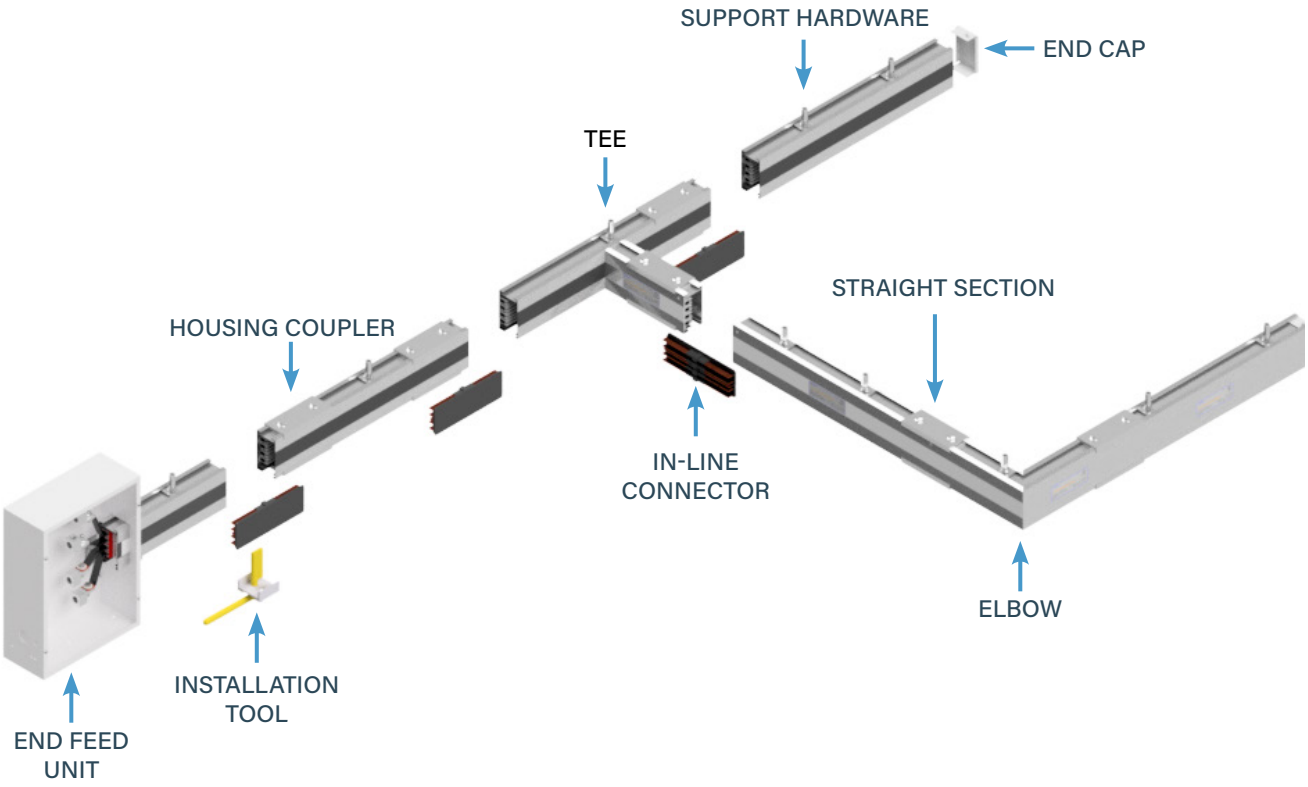
SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

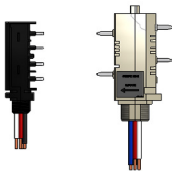
For further information on applicable T3 plug-in unit options, please consult the factory.

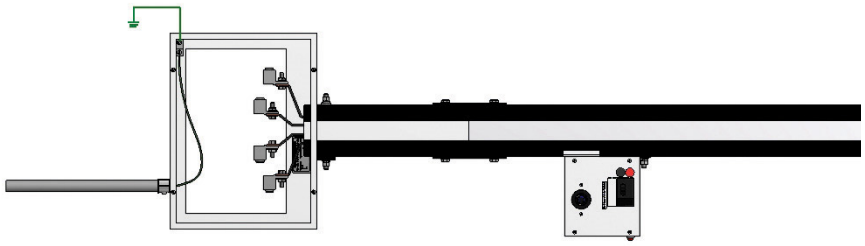
T3 SERIES

GROUND OPTIONS

CASE GROUND/CHASSIS EARTH

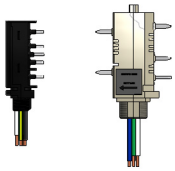
Uses aluminum housing and no extra copper bar.

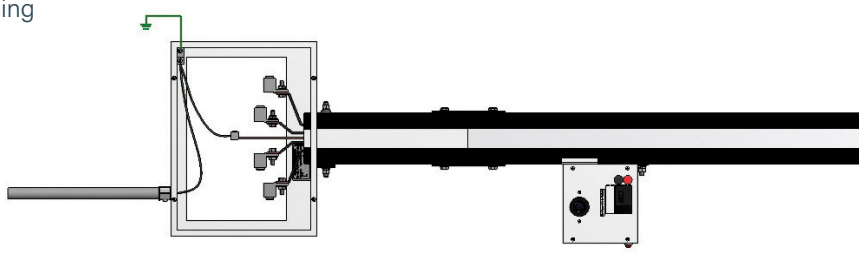




DEDICATED GROUND/EARTH

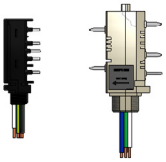
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.

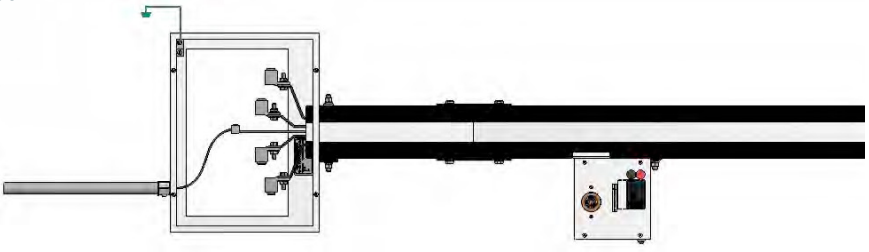




ISOLATED GROUND/EARTH

Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.





*For further details about Dedicated Ground vs. Isolated Ground, please reference our “Isolated Ground vs. Dedicated Ground” tech brief on **downloads.starlinepower.com**

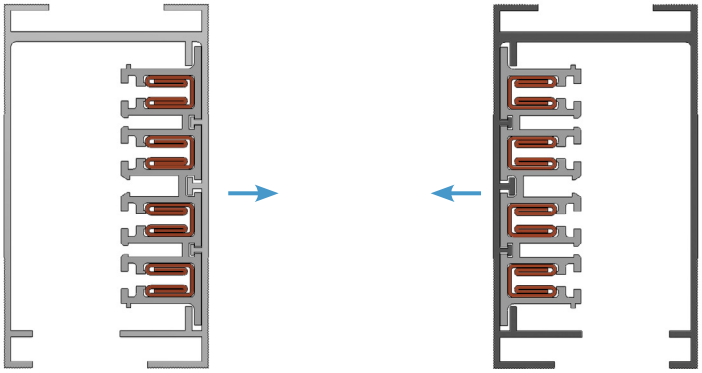
T3 SERIES

POLARITY TIPS

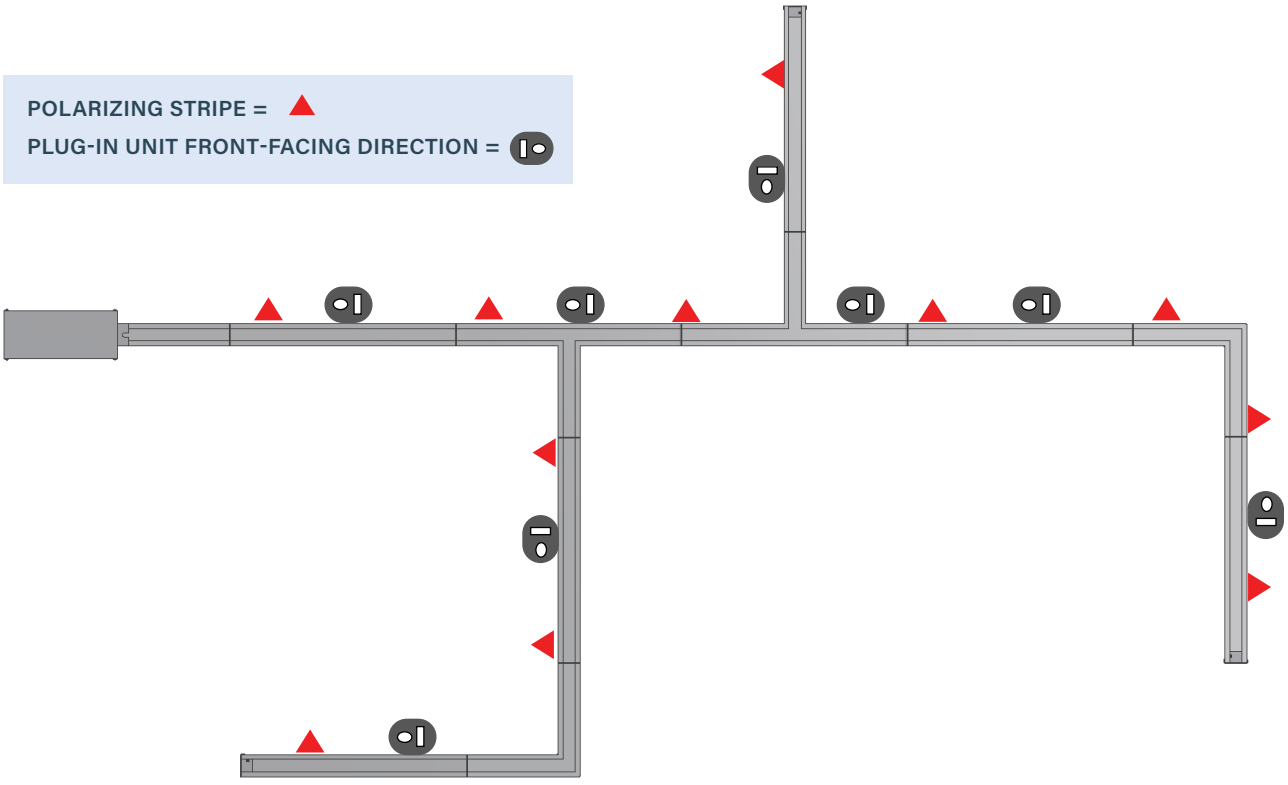
Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

It is particularly important to understand this design concept prior to ordering and/or installing some components.

For example, if the face direction of a Starline plug-in unit is important in your installation consider that they will always face the conductor side. Certain plug-in units are 'reversible,' designated by 'R,' to face devices away from the conductor side.



All standard outlet boxes face the conductor side unless reversed plugs are specified



T3 SERIES

SYSTEM LAYOUT TIPS

POWER FEEDS

Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

SUPPORT HARDWARE

Support hardware is spaced no more than 3 meters apart. Refer to **page 3.36** for support hardware details. Contact your local Starline applications engineer for any questions.

INSTALLATION

Printed installation drawings are supplied with each system shipment and they are also available for download online at **downloads.starlinepower.com/busway/**. CAD files of these drawings are also available by contacting your local Starline applications engineer.

BUSWAY HOUSING SECTIONS

Standard Busway lengths are available in 1.5 meter, 3 meter and 6 meter increments. Although the factory can cut individual Starline Track Busway sections to any length under 6 meters, it is highly recommended to keep all layout runs in increments of 1.5 meters to simplify layout and installation. Custom lengths can be made but can increase lead time and make layout and installation a bit more complex.

BUSWAY TEES AND ELBOWS SECTIONS

Try to keep all runs as straight as possible as tees and elbows are added cost. Pay close attention to polarity on the elbows. The polarity will need to match the adjacent busway section(s) to be compatible.

T3 SERIES

COMPONENT RELATIONSHIP TIPS

When ordering material, it is important to understand the relationship between various components.

EXAMPLES

- Each piece of housing *(straights and elbows)* requires a joint kit *(containing two housing couplers and one bus connector)*. Determine the total number of housing sections *(regardless of length)* as this becomes the number of joint kits that will be needed.
  - Add one extra joint kit for each tee section
- If this is your first installation for 160T3 or 225T3 systems, you will need to order an installation tool (ST3IT).

GENERAL SUPPORT HARDWARE RULE TO FOLLOW:

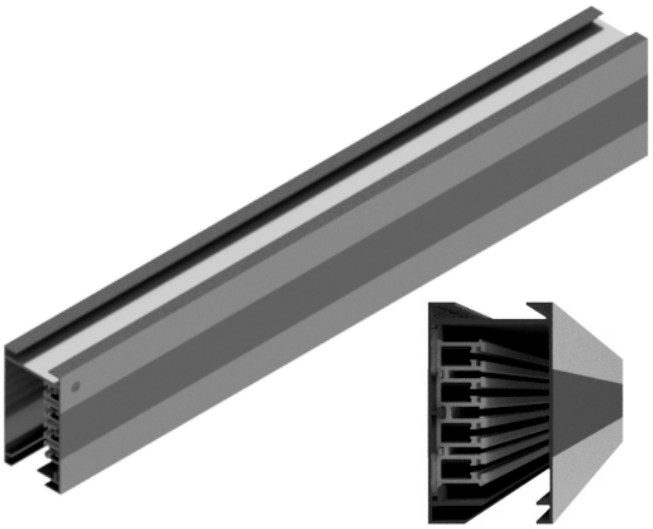
- 3 meter maximum spacing between supports and we recommend 10% more than the required quantity to cover potential layout changes.
- Total power feeds and end caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to **page 3.4** Polarity Tips for more detail.

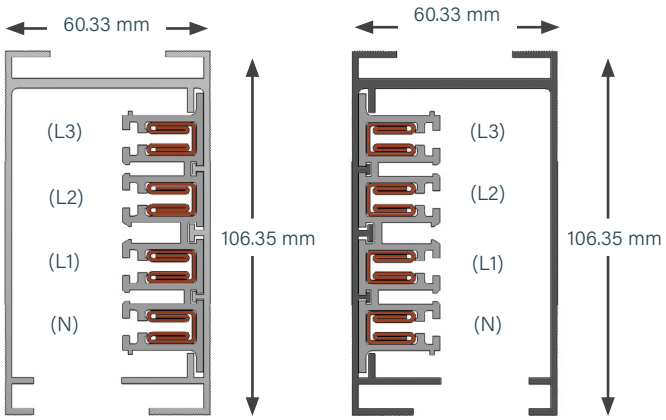
160T3 SYSTEMS

STRAIGHT SECTIONS

PRODUCT DESCRIPTION

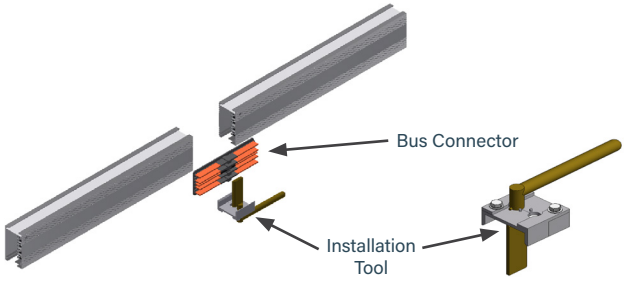
Track Busway straight sections consist of an extruded aluminum shell with channel type solid copper busbars contained in a full length insulator mounted on one side of the interior wall. Each straight has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configuration is 4 pole, 415 Volt. Busway joint connections are made using a joint kit, which includes a housing coupler and bus connector. An installation tool is used to insert the bus connector in between the busbar channels of the two sections for a solid spring-tempered electrical connection. A housing coupler is then used to make a solid mechanical connection.





MATERIAL
Extruded Aluminum
RATINGS
100% Protective Earth 160 Amp, 415 Volt
LENGTH
1.5 m, 3 m, 6 m; or custom lengths between 1.5 - 6 m
WEIGHT
3m 4 pole: 11.8 kg 3m 4 pole w/ ground: 13.6 kg 3m 4 pole w/ 200% N: 15 kg 3m 4 pole w/ ground & 200% N: 15.4 kg

METRIC		
L1 or Phase A		brown
L2 or Phase B		black gray
L3 or Phase C		blue
Neutral Ground		green/yellow



160T3 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

M	S	160	T3	C	4	S	– M030	C	– STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Straight Length	9. Busway Access	10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

S Straight Section

3. Product Frame *(maximum amperage)*

160 160 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Straight Length *(length of section)*

MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 3.35)*

11. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**6**	Tape Factory Red
3	Tape Factory Black	**7**	Tape Factory Blue
4	Tape Factory White	**8**	Tape Factory Green

EXAMPLES

MS160T3C4S-M200C-STD0 = *Metric System, Straight Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 2 meter Straight Length, Continuous Busway Access, Standard Mill Finish, No Tape Marking*

MS160T3CNS-M600C-P013 = *Metric System, Straight Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, 6 meter Straight Length, Continuous Busway Access, Painted RAL 1001, Black Tape Marking*

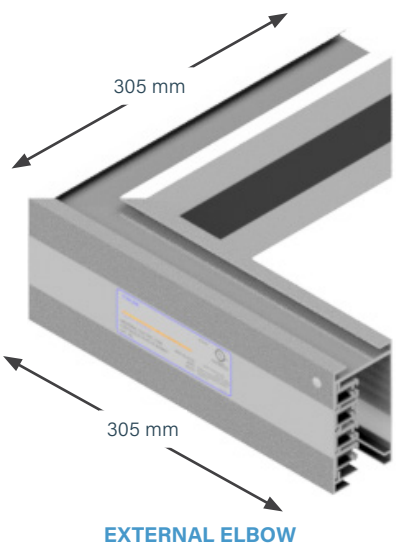
160T3 SYSTEMS

ELBOW SECTIONS

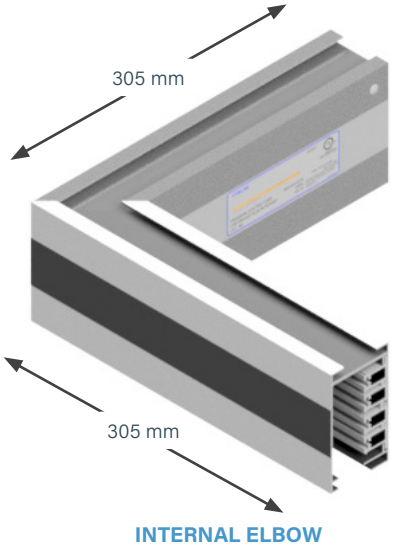
PRODUCT DESCRIPTION

Elbows are used for making a 90 degree in a busway run. Horizontal elbows are available. Specify external or internal elbow according to the orientation of the busbars in the busway sections to be connected. Elbow sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a straight section and elbow section of busway.

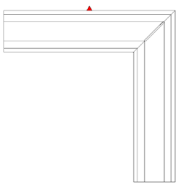
Weight 2.5 kg



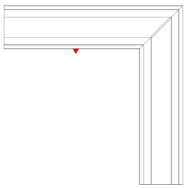
EXTERNAL ELBOW



INTERNAL ELBOW

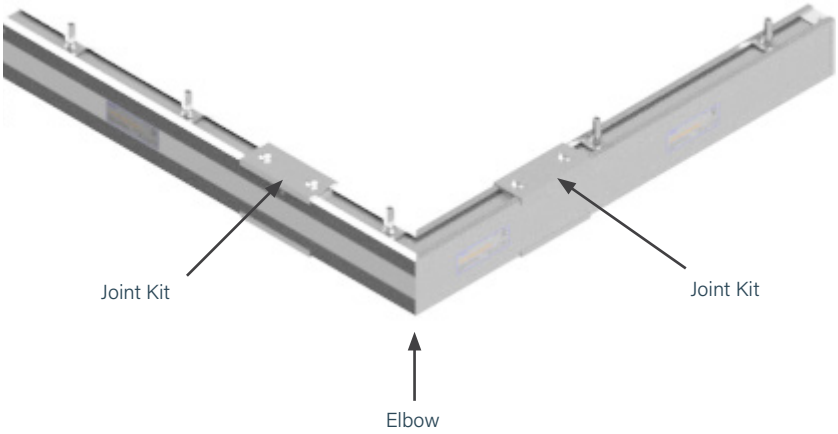


External Elbow



Internal Elbow

▲ = Polarizing Stripe



160T3 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

M	E	160	T3	C	4	S	–	IN
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction

–	STD	0
	9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

E Elbow Section

3. Product Frame *(maximum amperage)*

160 160 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN	Internal	**EX**	External
HN	Seismic Internal	**GX**	Seismic External

9. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 3.35)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**6**	Tape Factory Red
3	Tape Factory Black	**7**	Tape Factory Blue
4	Tape Factory White	**8**	Tape Factory Green

EXAMPLES

ME160T3C4S-IN-BLK4 = *Metric System, Elbow Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization- Internal Turning Direction- Painted Factory Black, White Tape Marking*

ME160T3CNS-EX-STD0 = *Metric System, Elbow Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization- External Turning Direction- Standard Mill Finish, No Tape Marking*

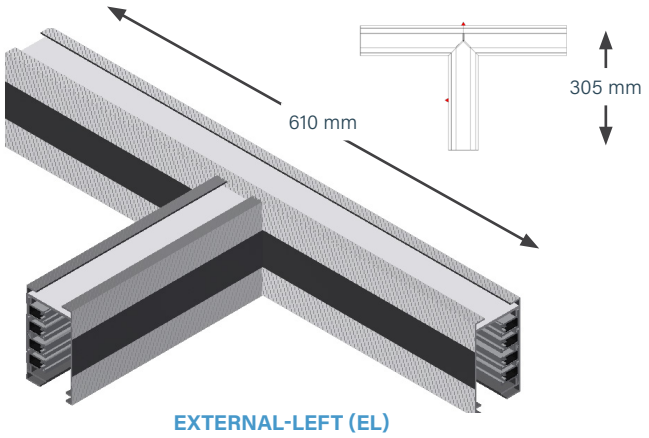
160T3 SYSTEMS

TEE SECTIONS

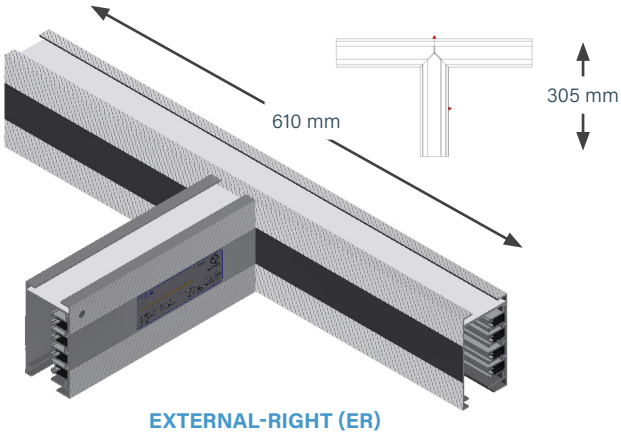
PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a straight section and tee section of busway.

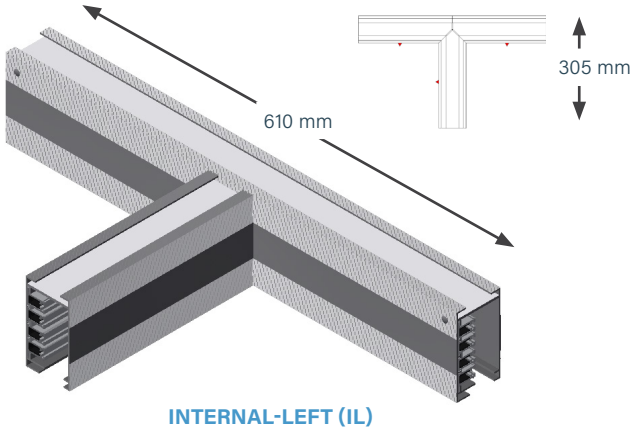
Weight 3.6 kg



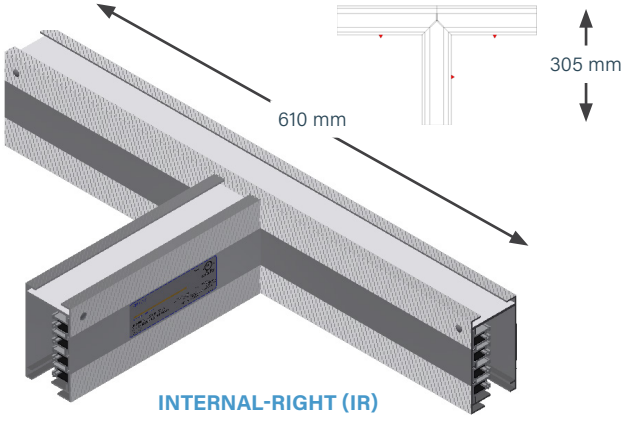
EXTERNAL-LEFT (EL)



EXTERNAL-RIGHT (ER)



INTERNAL-LEFT (IL)



INTERNAL-RIGHT (IR)

▲ = Polarizing Stripe

160T3 SYSTEMS

TEE SECTIONS: PRODUCT NUMBERS

M	T	160	T3	C	4	S	–	IR	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

T Tee Section

3. Product Frame *(maximum amperage)*

160 160 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IL	Internal-Left	**EL**	External-Left
IR	Internal-Right	**ER**	External-Right
HL	Seismic Internal-Left	**GL**	Seismic External-Left
HR	Seismic Internal-Right	**GR**	Seismic External-Right

9. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 3.35)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0	No Tape Marking	**6**	Tape Factory Red
3	Tape Factory Black	**7**	Tape Factory Blue
4	Tape Factory White	**8**	Tape Factory Green

EXAMPLES

MT160T3C4S-IR-RED0 = *Metric System, Tee Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking*

MT160T3CGS-EL-STD0 = *Metric System, Tee Section, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Standard Mill Finish, No Tape Marking*

160T3 SYSTEMS

END FEED UNITS

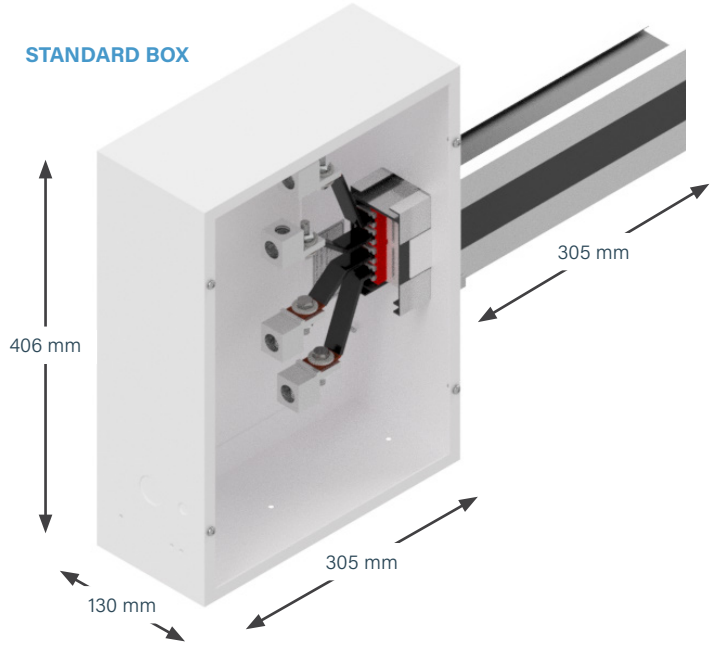
PRODUCT DESCRIPTION

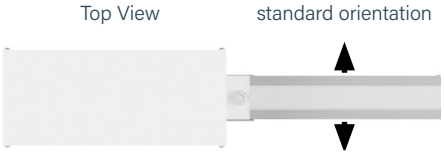
End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 305 millimeter section of busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 150 mm^2.

End power feed units are connected to adjacent busway sections using an installation tool and housing coupler set *(ordered separately)*.

Special need power feed units for confined spaces as found in mission critical data centers can also be designed and fabricated requiring minimum quantities.

STANDARD BOX

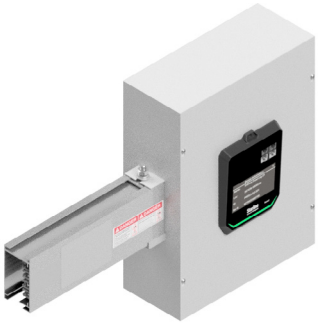




INFRARED (IR) WINDOW OPTIONS:

Refer to option 10. Accessories Package on **page 3.16** End Feed Units: Product Numbers

Large box with circular IR window



Standard box with M73 CPM

	BOXES		
LUGS	Standard	Large	Fused
Standard	**S**	**L**	
Double	**D**	**A**	
Bolt			

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 3.16** *End Feed Units: Product Numbers*

Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com/

160T3 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

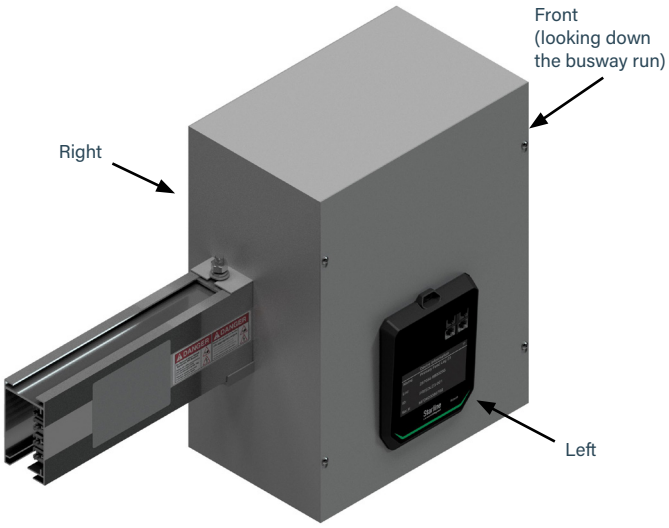
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

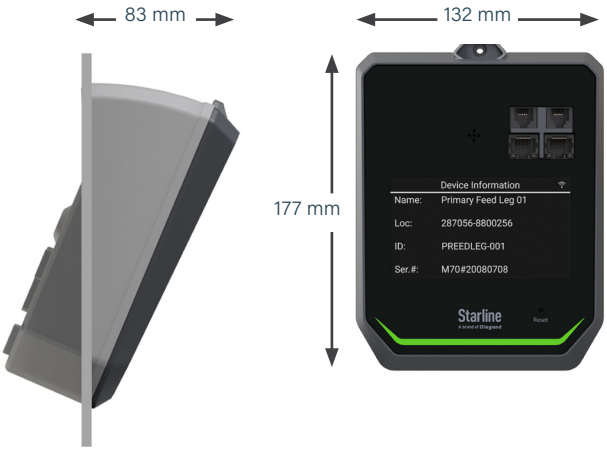
The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX



*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 3.16** *End Feed Units: Product Numbers).*



*Large box with one meter or accessory is 193 mm deep, and large box with one meter and accessory (on opposite lids) extends the depth to 257 mm.

*Any metering configuration that includes temperature monitoring will require a box depth of 1257 mm.

A meter and accessory can not be on the same lid.

160T3 SYSTEMS

END FEED UNITS: ACCESSORIES

IR WINDOWS

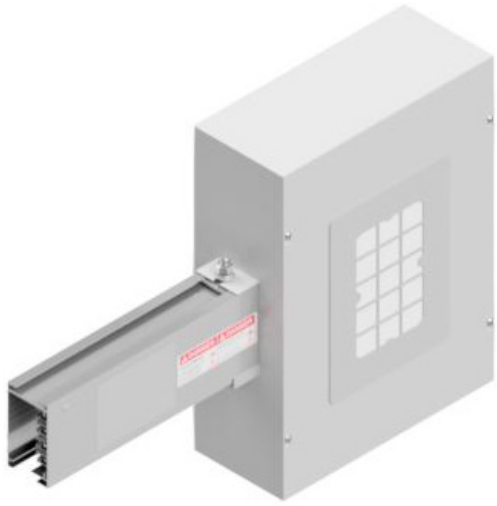
Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance



GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T3); IP54 (S3)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5" (127mm) x 7" (178mm)
End Feeds: 630A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 3.17** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 3.16** End Feed Units: Product Numbers)*

160T3 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

M	F	160	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

F End Feed

3. Product Frame *(maximum amperage)*

160 160 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor
N 3 Phase plus 200% Neutral
F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard
R Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box
L Standard lugs, Large box
D Double lugs, Standard box
A Double lugs, Large box

9. Meter Location *(from the terminal, side with removable lid; meter must follow lid orientation on large box)*

R Right
N None (N/A)
L Left

10. Accessories Package *(optional accessories for feed units)*

S Standard
G Starline Rect. IR Window, 5" (127mm) x 7" (178mm)
C IR Window - Circular
O Seismic Mounting Holes
D Seismic with IR Window Circular
Q Seismic with IR Window Rectangular

11. Accessories Location *(from the terminal, side with accessory)*

N None (N/A)
L Left
R Right
F Front (consult the factory)

12. Straight Length *(length of section)*

M030 .3 meters *(For other lengths, consult the factory)*

13. Busway Access

C Continuous

14. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 3.35)*

15. Tape Marking *(colored tape on both sides of busway housing)*

0 None
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green

EXAMPLE

MF160T3C4R-LNSN-M030C-STD0 = *Metric System, End Feed, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape MarkingMarking*

160T3 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

M	F	160	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*18. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

M73
(2) RJ11, (2) RJ45, Lg. Display

M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

MF160T3C4R-LNSN-M030C-STD0-M73001 = *Metric System, End Feed, 160 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, No Meter Location, Standard Accessory Package, No Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

160T3 SYSTEMS

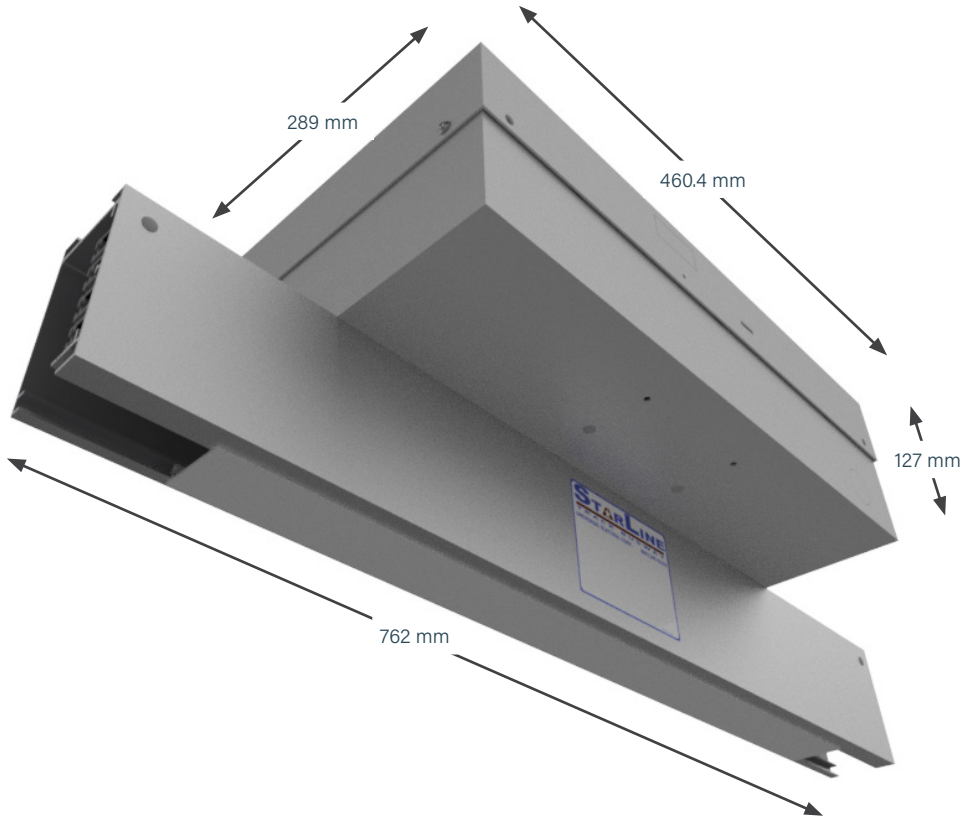
ABOVE FEED UNITS

PRODUCT DESCRIPTION

The above feed power unit comes as a completely pre-wired steel box to the top of a 762 millimeter section of busway. A connection lug is located inside the box for field termination of supply power cable up to 1/0. This unit is then connected to the end of an adjoining busway section using an installation tool and set of housing couplers (ordered separately).

Weight 7.5 kg

*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on **downloads.starlinepower.com/**



160T3 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

M	A	160	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M067	C	038	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

A Above Feed

3. Product Frame *(maximum amperage)*

160 160 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

N 3 Phase plus 200% Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard **R** Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box **L** Standard lugs, Large box

9. Meter Location *(from the terminal, side with removable lid; meter must follow lid orientation on large box)*

R Right **L** Left **N** None (N/A)

10. Accessories Package *(optional accessories for feed units)*

S Standard

11. Accessories Location *(from the terminal, side with removable lid)*

N None (na) **R** Right **A** Rear
L Left **T** Top **F** Front

12. Straight Length *(length of section)*

M076 .76 meters

13. Busway Access *(how plugs access the busway)*

C Continuous

14. Feed Location *(location of the center of the top feed)*

038 38 centimeters *(For other lengths, consult the factory)*

15. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 3.35)*

16. Tape Marking *(colored tape on both sides of busway housing)*

0 None
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green

EXAMPLE

MA160T3CFS-LNSN-M076C038-STD0 = *Metric System, Above Feed, 160 amps, T3 Series, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Large Box, No Lid Orientation, Standard Accessory Package, No Accessory Location, .76 meter Straight Length, Continuous Busway Access, 38 centimeter Feed Location, Painted Factory Silver, No Tape Marking*

160T3 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

M	A	160	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M067	C	038	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

*17. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*17. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*18. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*19. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral
8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*19. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

EXAMPLE

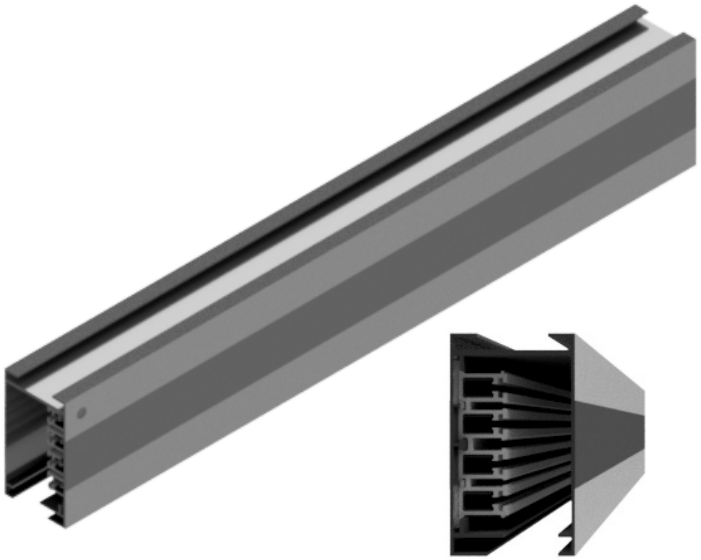
MA160T3CFS-LNSN-M076C038-STD0 = *Metric System, Above Feed, 160 amps, T3 Series, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Large Box, No Lid Orientation, Standard Accessory Package, No Accessory Location, .76 meter Straight Length, Continuous Busway Access, 38 centimeter Feed Location, Painted Factory Silver, No Tape Marking*

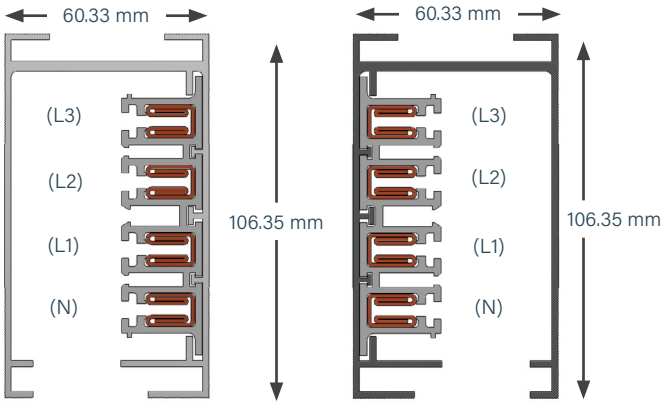
225T3 SYSTEMS

STRAIGHT SECTIONS

PRODUCT DESCRIPTION

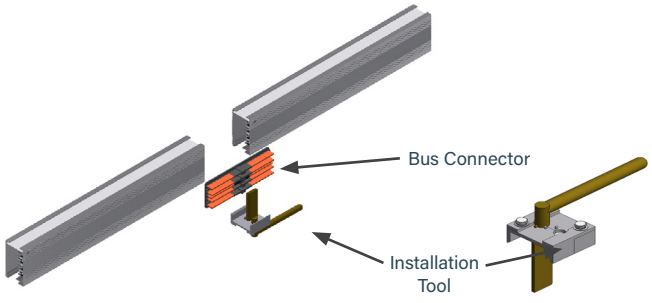
Track Busway straight sections consist of an extruded aluminum shell with channel type solid copper busbars contained in a full length insulator mounted on one side of the interior wall. Each straight has an open access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configuration is 4 pole, 415 Volt. Busway joint connections are made using a joint kit, which includes a housing coupler and bus connector. An installation tool is used to insert the bus connector in between the busbar channels of the two sections for a solid spring-tempered electrical connection. A housing coupler is then used to make a solid mechanical connection.





MATERIAL
Extruded Aluminum
RATINGS
100% Ground Path 225 Amp, 600 Volt
LENGTH
1.5 m, 3 m, 6 m; or custom lengths between 1.5 - 6 m
WEIGHT
3m 4 pole: 15 kg

METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow



225T3 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

M	S	225	T3	C	4	S	– M030	C	– STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Straight Length	9. Busway Access	10. Paint Color	11. Tape Marking

1. System *(standard of measure)*
M Metric

2. Product Type *(section component)*
S Straight Section

3. Product Frame *(maximum amperage)*
225 225 amps

4. Compatibility *(frame compatibility)*
T3 T3 Series

5. Material *(busbar material)*
C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*
4 3 Phase plus Neutral

7. Polarization *(orientation of section for mating purposes)*
S Standard

8. Straight Length *(length of section)*
MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*
C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 3.35)*

11. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**6**	Tape Factory Red
3	Tape Factory Black	**7**	Tape Factory Blue
4	Tape Factory White	**8**	Tape Factory Green

EXAMPLES

MS225T3C4S-M100C-STD6 = *Metric System, Straight Section, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 1 meter Straight Length, Continuous Busway Access, Standard Mill Finish, Red Tape Marking*

MS225T3C4S-M600C-P013 = *Metric System, Straight Section, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 6 meter Straight Length, Continuous Busway Access, RAL 1001, Black Tape Marking*

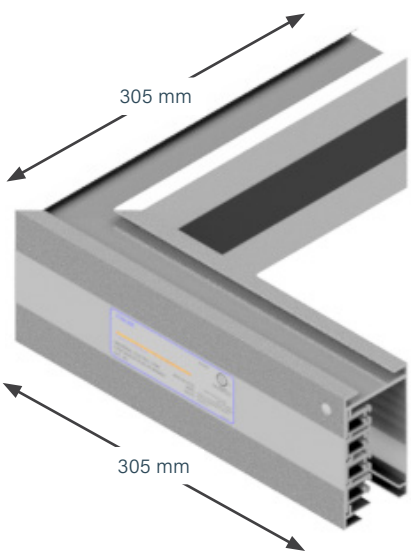
225T3 SYSTEMS

ELBOW SECTIONS

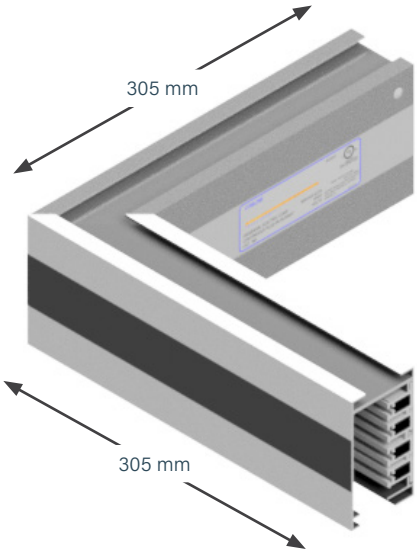
PRODUCT DESCRIPTION

Elbows are used for making a 90 degree in a busway run. Horizontal elbows are available. Specify external or internal elbow according to the orientation of the busbars in the busway sections to be connected. Elbow sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a straight section and elbow section of busway.

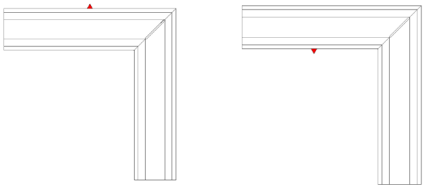
Weight 2.5 kg



EXTERNAL ELBOW

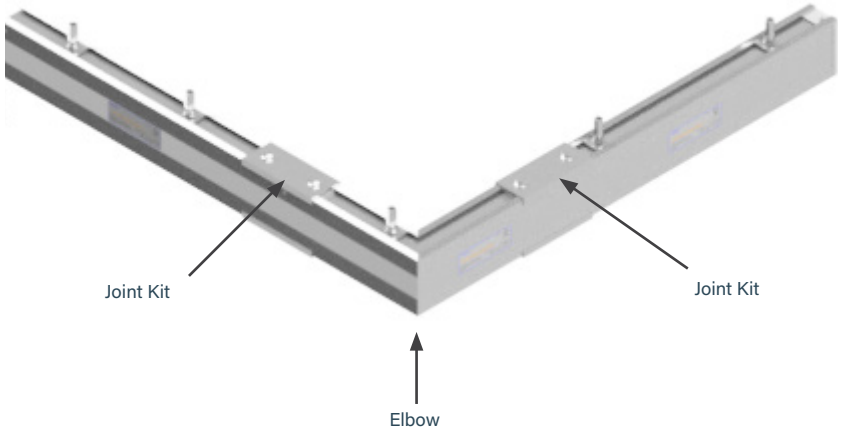


INTERNAL ELBOW



External Elbow Internal Elbow

▲ = Polarizing Stripe



225T3 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

M	E	225	T3	C	4	S	–	IN	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

E Elbow Section

3. Product Frame *(maximum amperage)*

225 225 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN Internal
HN Seismic Internal
EX External
GX Seismic External

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 3.35)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 None
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green

EXAMPLES

ME225T3C4S-EX-WHT0 = *Metric System, Elbow Section, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External Turning Direction, Painted Factory White, No Tape Marking*

ME225T3C4S-IN-PH40 = *Metric System, Elbow Section, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted RAL 5014, No Tape Marking*

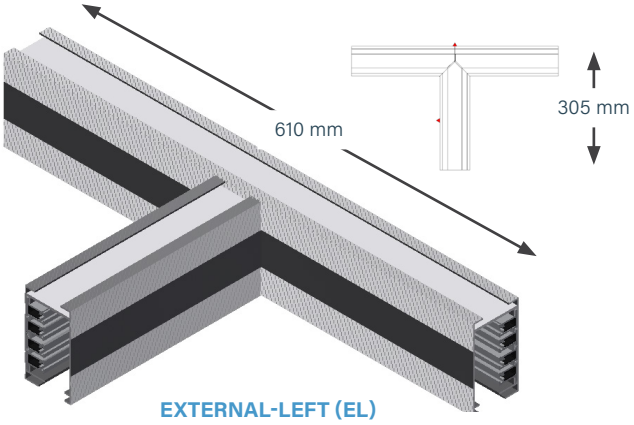
225T3 SYSTEMS

TEE SECTIONS

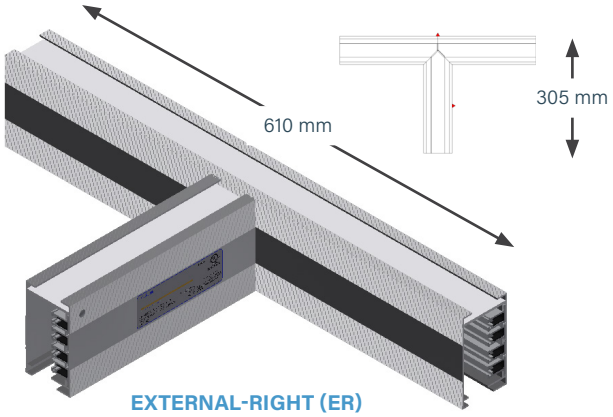
PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a housing section and tee section of busway.

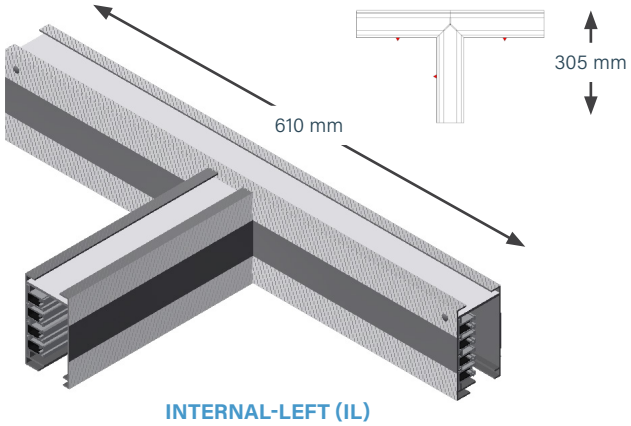
Weight 4.2 kg



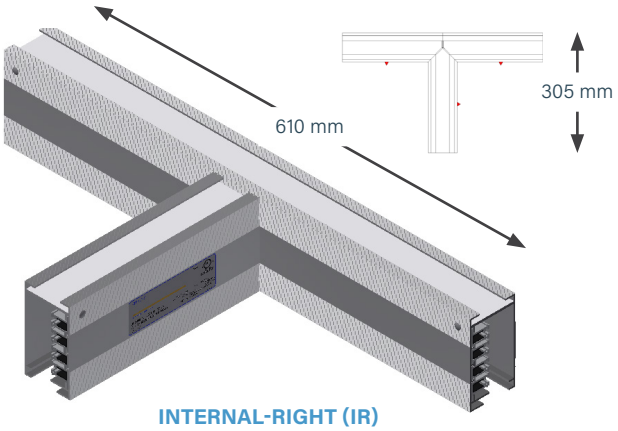
EXTERNAL-LEFT (EL)



EXTERNAL-RIGHT (ER)



INTERNAL-LEFT (IL)



INTERNAL-RIGHT (IR)

▲ = Polarizing Stripe

225T3 SYSTEMS

TEE SECTIONS: PRODUCT NUMBERS

M	T	225	T3	C	4	S	–	IR	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

T Tee Section

3. Product Frame *(maximum amperage)*

225 225 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IL	Internal-Left	**EL**	External-Left
IR	Internal-Right	**ER**	External-Right
HL	Seismic Internal-Left	**GL**	Seismic External-Left
HR	Seismic Internal-Right	**GR**	Seismic External-Right

9. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 3.35)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**6**	Tape Factory Red
3	Tape Factory Black	**7**	Tape Factory Blue
4	Tape Factory White	**8**	Tape Factory Green

EXAMPLES

MT225T3C4S-IR-BLU0 = *Metric System, Tee Section, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Blue, No Tape Marking*

MT225T3C4S-EL-STD0 = *Metric System, Tee Section, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, External-Left Turning Direction, Standard Mill Finish, No Tape Marking*

225T3 SYSTEMS

END FEED UNITS

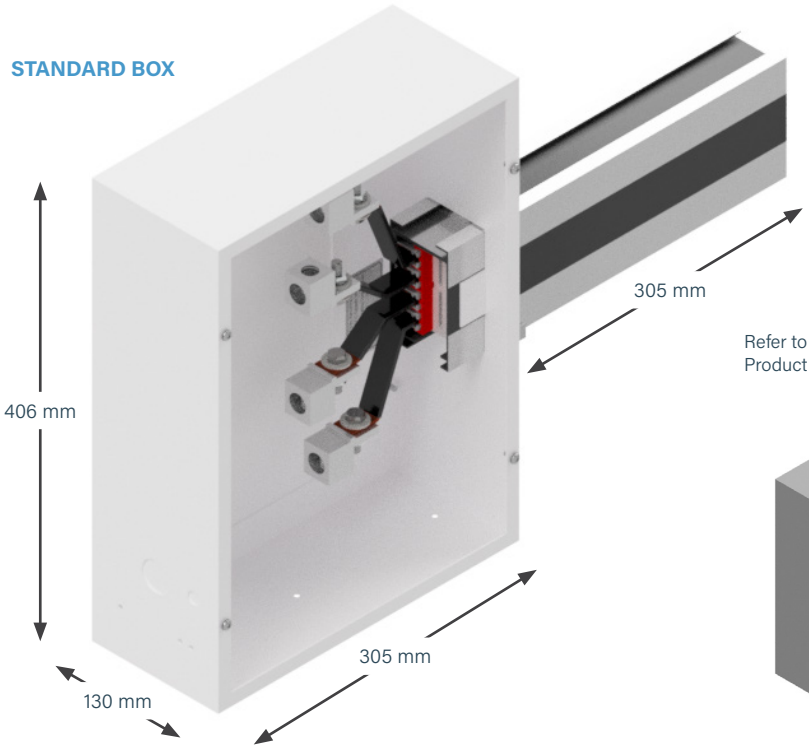
PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a steel junction box, with removable side, connected to a 305 millimeter section of busway. The assembly includes connection lugs, a ground lug and shrink tubing for wires up to 150 mm^2.

End power feed units are connected to adjacent busway sections using an installation tool and joint kit *(ordered separately)*.

Special need power feed units for confined spaces as found in mission critical data centers can also be designed and fabricated requiring minimum quantities.

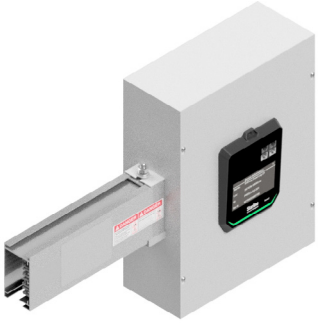
STANDARD BOX



INFRARED (IR) WINDOW OPTIONS:

Refer to option 10. Accessories Package on **page 3.30** End Feed Units: Product Numbers

Large box with circular IR window



Standard box with M73 CPM

	BOXES		
LUGS	Standard	Large	Fused
Standard	**S**	**L**	
Double	**D**	**A**	
Bolt			

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 3.30** *End Feed Units: Product Numbers*

225T3 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

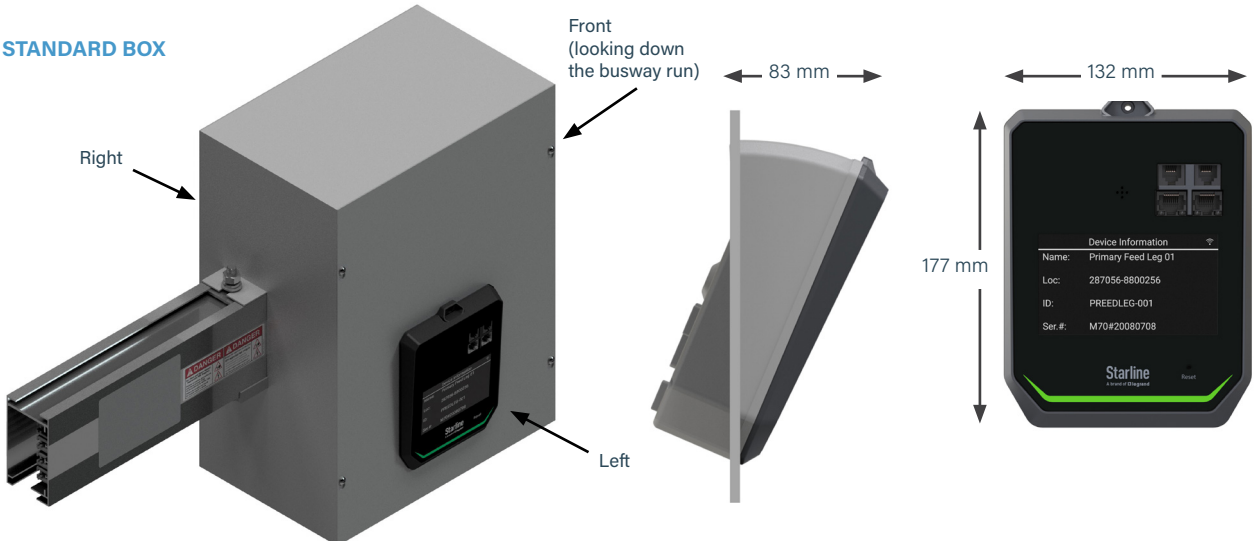
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX



*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 3.30** *End Feed Units: Product Numbers).*

*Large box with one meter or accessory is 193 mm deep, and large box with one meter and accessory (on opposite lids) extends the depth to 257 mm.

*Any metering configuration that includes temperature monitoring will require a box depth of 257 mm.

A meter and accessory can not be on the same lid.

225T3 SYSTEMS

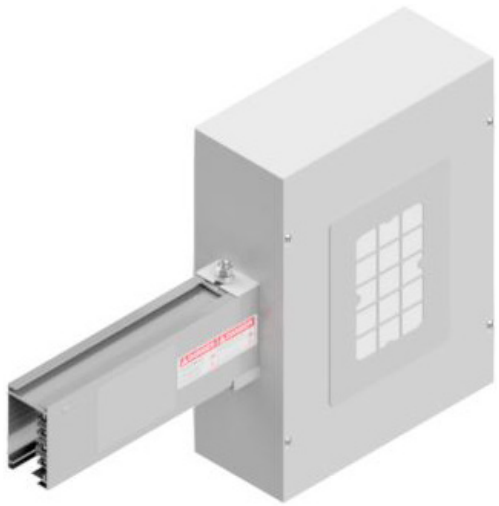
END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T3); IP54 (S3)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5" (127mm) x 7" (178mm)
End Feeds: 500A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 3.31** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 3.30** End Feed Units: Product Numbers)*

225T3 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

M	F	225	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

F End Feed

3. Product Frame *(maximum amperage)*

225 225 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

7. Polarization *(orientation of section for mating purposes)*

S Standard
R Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box
L Standard lugs, Large box
D Double lugs, Standard box
A Double lugs, Large box

9. Meter Location *(from the terminal, side with removable lid; meter must follow lid orientation on large box)*

R Right
N None (N/A)
L Left

10. Accessories Package *(optional accessories for feed units)*

S Standard
G Starline Rect. IR Window, 5" (127mm) x 7" (178mm)
C IR Window - Circular
O Seismic Mounting Holes
D Seismic with IR Window Circular
Q Seismic with IR Window Rectangular

11. Accessories Location *(from the terminal, side with accessory)*

N None (N/A)
L Left
R Right
F Front (consult the factory)

12. Straight Length *(length of section)*

M030 .3 meters *(For other lengths, consult the factory)*

13. Busway Access

C Continuous

14. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 3.35)*

15. Tape Marking *(colored tape on both sides of busway housing)*

0 None
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green

EXAMPLE

MF225T3C4R-DRSN-M030C-BLK0 = *Metric System, End Feed, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Double Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking*

225T3 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

M	F	225	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*18. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

M73
(2) RJ11, (2) RJ45, Lg. Display

M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

MF225T3C4R-DRSN-M030C-BLK0-M73001 = *Metric System, End Feed, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Double Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

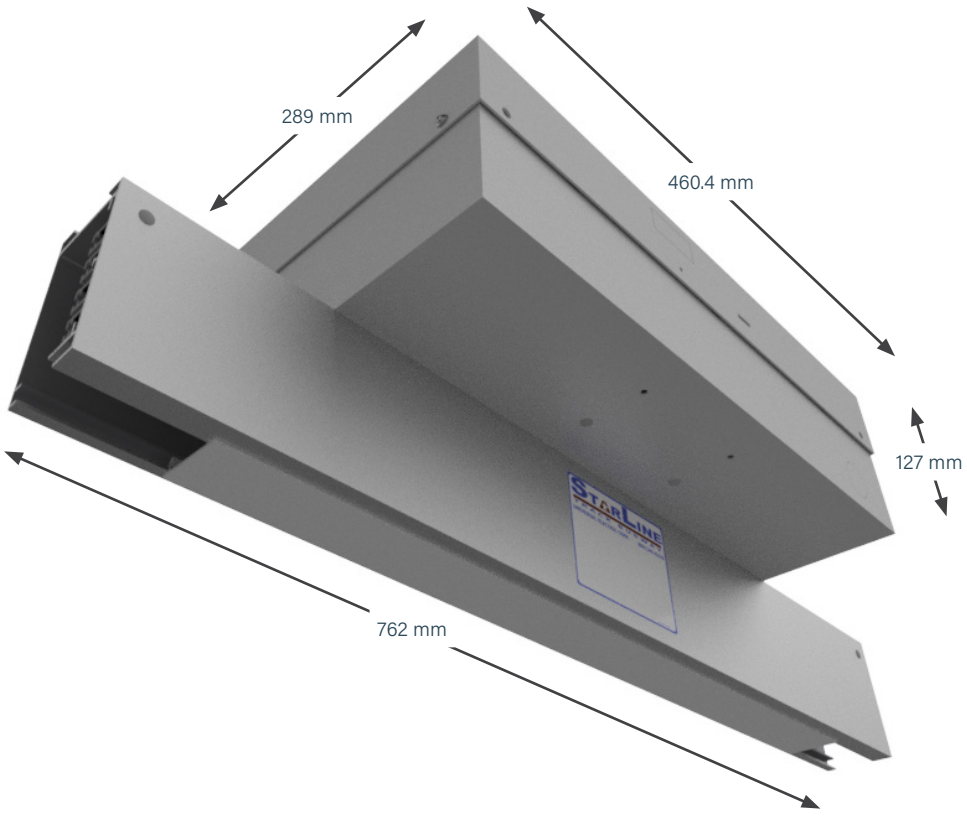
225T3 SYSTEMS

ABOVE FEED UNITS

PRODUCT DESCRIPTION

The above feed power unit comes as a completely pre-wired steel box to the top of a 762 millimeter section of busway. A connection lug is located inside the box for field termination of supply power cable up to 1/0. This unit is then connected to the end of an adjoining busway section using an installation tool and a joint kit *(ordered separately)*.

Weight 7.5 - 10.4 kg



225T3 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

M	A	225	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	038	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

A Above Feed

3. Product Frame *(maximum amperage)*

225 225 amps

4. Compatibility *(frame compatibility)*

T3 T3 Series

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

7. Polarization *(orientation of section for mating purposes)*

S Standard **R** Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box **L** Standard lugs, Large box

9. Meter Location *(from the terminal, side with removable lid; meter must follow lid orientation on large box)*

R Right **L** Left **N** None (N/A)

10. Accessories Package *(optional accessories for feed units)*

S Standard

11. Accessories Location *(from the terminal, side with removable lid)*

N None (N/A) **R** Right **A** Rear
L Left **T** Top **F** Front

12. Straight Length *(length of section)*

M076 .76 meters

13. Busway Access *(how plugs access the busway)*

C Continuous

14. Feed Location *(location of the center of the top feed)*

038 38 centimeters *(For other lengths, consult the factory)*

15. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish **RED** Paint Factory Red
BLK Paint Factory Black **BLU** Paint Factory Blue
WHT Paint Factory White ****RAL** *(please see page 3.35)*

16. Tape Marking *(colored tape on both sides of busway housing)*

0 None **6** Tape Factory Red
3 Tape Factory Black **7** Tape Factory Blue
4 Tape Factory White **8** Tape Factory Green

EXAMPLE

MA225T3C4R-SNSN-M076C038-STD0 = *Metric System, Above Feed, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, No Meter Location, Standard Accessory Package, No Accessory Location, .76 meters Straight Length, Continuous Busway Access, 38 centimeter Feed Location, Painted Factory Silver, No Tape Marking*

225T3 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

M	A	225	T3	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	038	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

*17. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*17. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*18. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*19. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*19. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

EXAMPLE

MA225T3C4R-SNSN-M076C038-STD0 = *Metric System, Above Feed, 225 amps, T3 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, No Meter Location, Standard Accessory Package, No Accessory Location, .76 meters Straight Length, Continuous Busway Access, 38 centimeter Feed Location, Painted Factory Silver, No Tape Marking*

T3 SERIES

RAL COLORS

1ST CHARACTER	
P	Paint

2ND CHARACTER	
0	100
1	101
2	102
3	103
4	200
5	201
A	300
B	301
C	302
D	303
E	400
F	401
G	500
H	501
J	502
K	600
L	601
M	602
N	603
P	700
Q	701
R	702
S	703
T	704
U	800
V	801
W	802
X	900
Y	901
Z	902

3RD CHARACTER	
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

4TH CHARACTER	
0	0

EXAMPLE:

P B 2 0 = Paint RAL 3012

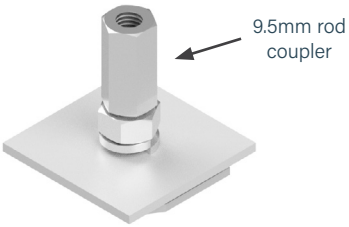
T3 SERIES

ACCESSORIES: SUPPORT HARDWARE

THREADED ROD

For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the top full-access slot of busway. Hanger support is required every 3 meters maximum.

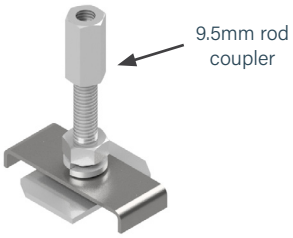
Part Number
MBRH-M10
Available in plain zinc or black (-BLK)
Weight
.14 kg



SEISMIC THREADED ROD

For mounting to 3/8 - 16 threaded rod. Can be inserted anywhere along the top full-access slot of busway, and includes a seismic brace. Hanger support is required every 3 meters maximum.

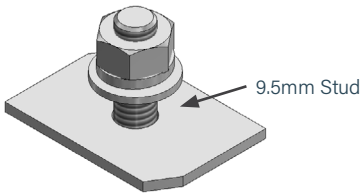
Part Number
MBRS-M10
Available in plain zinc or black (-BLK)
Weight
.14 kg



STANDARD

For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top full-access slot on the busway. Hanger support is required every 3 meters maximum.

Part Number
MBH-M10
Available in plain zinc or black (-BLK)
Weight
.09 kg



WEIGHT HOOK

Can be used as a hanger to suspend the busway from chains or cables. Can also be used to hang loads up to 45.4 kg under the busway, such as light fixtures, tools and balancers.

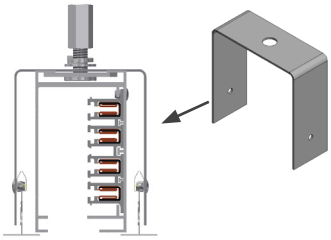
Part Number
SWHRT3
Available in plain zinc
Weight
.09 kg

RECESSED SUSPENDED CEILINGS

For hanging busway into a recessed ceiling.

**Hanger bolt must be ordered separately*

Part Number
SRMT3-1
Available in plain zinc



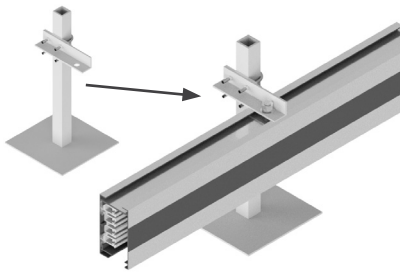
T3 SERIES

ACCESSORIES: SUPPORT HARDWARE

RAISED ACCESS FLOOR

For mounting the busway vertically (with access slot facing down) for under floor applications.

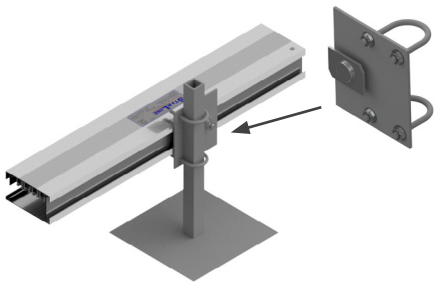
Part Number
MRFBT3-1
**MBH-M10 comes included*
Available in plain zinc or black (-BLK)



RAISED MOUNTING BRACKET

For mounting the busway horizontally (with access slot facing to the side) for under floor applications. Pedestal not included.

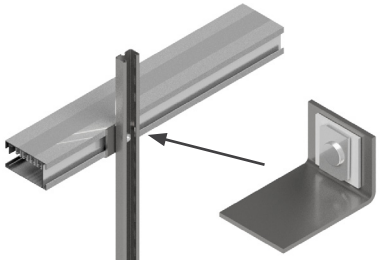
Part Number
MRFBT3-2
Available in plain zinc or black (-BLK)
Weight
.09 kg



SIDE MOUNT SUPPORT BRACKET

Mounted to vertical supports. Vertical supports not included, only bracket.

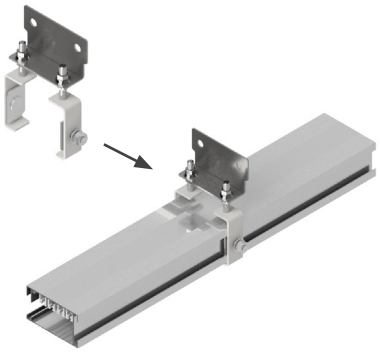
Part Number
MBSS-1
Available in plain zinc or black (-BLK)
Weight
.09 kg



SIDE MOUNT HANGER BRACKET

Mounted to overhead supports

Part Number
MBH-T3-SIDE
Available in plain zinc or black (-BLK)
Weight
.59 kg



T3 SERIES

ACCESSORIES: SUPPORT HARDWARE

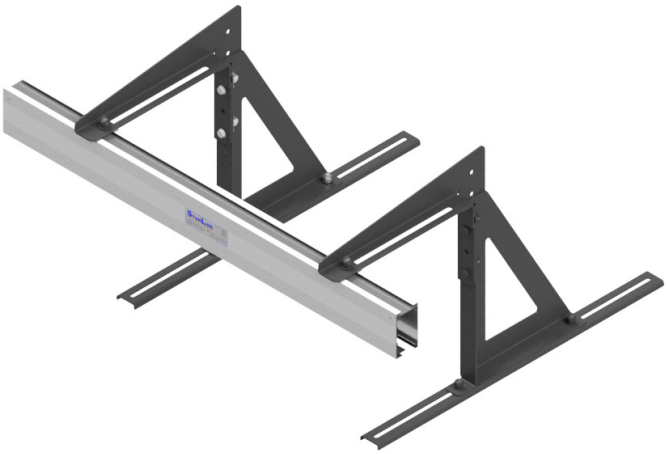
PRODUCT DESCRIPTION

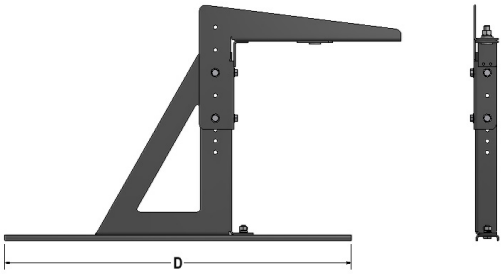
UNIVERSAL SERVER CABINET MOUNTING BRACKETS

The Universal Server Cabinet Mounting Brackets are designed with generous 3/8 inch (9.5 millimeter) wide through slots to mount directly onto virtually any server cabinet.

These accessories quickly and easily provide a flexible busway mounting solution on top of server cabinets, eliminating the need for threaded rod and strut support from the ceiling. The brackets are adjustable in height, can be ordered in virtually any color, and can be positioned at any depth on the server cabinet. Moreover, they can accommodate up to (2) runs of busway.

Hanger Bolt Included – MBH-M10





MATERIAL
Galvanneal Steel
HEIGHT
449 mm Min 603 mm Max Maximum Spacing: Every 3 m per run

C: Color *(1, 3, 4, 6, 7)*

1	Anodized Silver	**6**	Red
3	Black	**7**	Blue
4	White		

**consult factory for custom colors*

Part Number
MUSCMB-(X)-(D)-(C)

X = System (T3)
D = Depth (762 mm, 914 mm, 1067 mm, 1219 mm or custom length)
C = Color (1, 3, 4, 6, 7)

EXAMPLES

MUSCMB-T3-762-4 = *Metric System, Universal Server Cabinet Mounting Bracket, T3 Series, 762 millimeter Depth, White*

MUSCMB-T3-1219-3 = *Metric System, Universal Server Cabinet Mounting Bracket, T3 Series, 1219 millimeter Depth, Black*

T3 SERIES

ACCESSORIES: CONNECTION HARDWARE

JOINT KIT

For the connection of adjacent busway sections. One kit is required at each joint. Each kit is comprised of a housing coupler pair and bus connector set.

Bus Connector: copper blades secured to an insulating mounting plate. This makes the electrical connection between sections.

Housing Couplers: one pair that consists of a 2-bolt coupler for the top of busway, and a 4-bolt coupler for the bottom of busway.

Installation tool is required* *(page 3.40)***

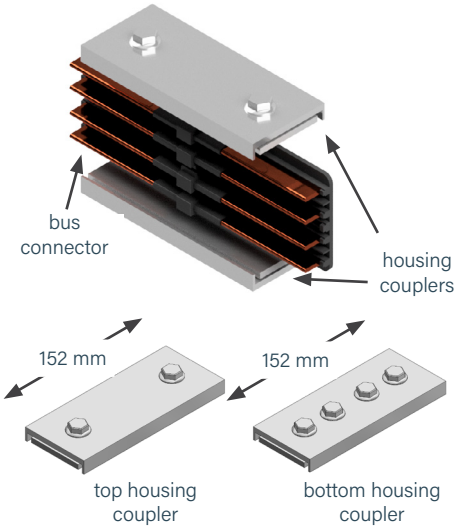
Part Number
*MJK160T3 (for **160 & 225 amp systems**)*

*MJK160T3G (for **160 & 225 amp systems** with ground)*

*MJK160T3N (for **160 & 225 amp systems** with 200% neutral)*

*MJK160T3F (for **160 & 225 amp systems** with ground and 200% neutral)*

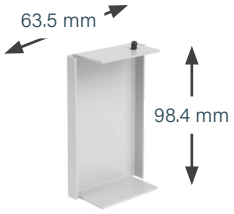
Available in all standard and RAL colors



END CAP

For covering the end of 100T3 or 225T3 busway.

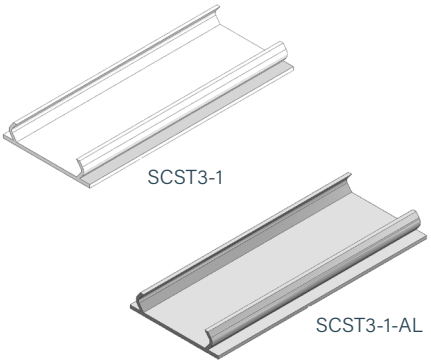
Part Number
SECT3
Available in all standard and RAL colors
Weight: .09 kg



OPTIONAL CLOSURE STRIP

Snaps into bottom access slot of busway housing. The optional closure strip is normally shipped in 6 meter lengths and can be field cut to fit exact desired length. The closure strip is offered in both nonconductive plastic material and aluminum.

Part Number
SCST3-1
Aluminum closure strip:
SCST3-1-AL
-Plastic Closure Strip available in black & white
-Aluminum Closure Strip available in all
standard colors
Maximum Cut Length: 6m



T3 SERIES

ACCESSORIES: INSTALLATION TOOL

PRODUCT DESCRIPTION

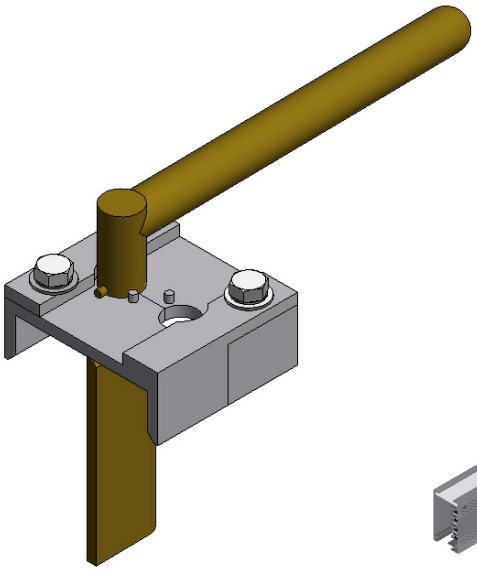
INSTALLATION TOOL

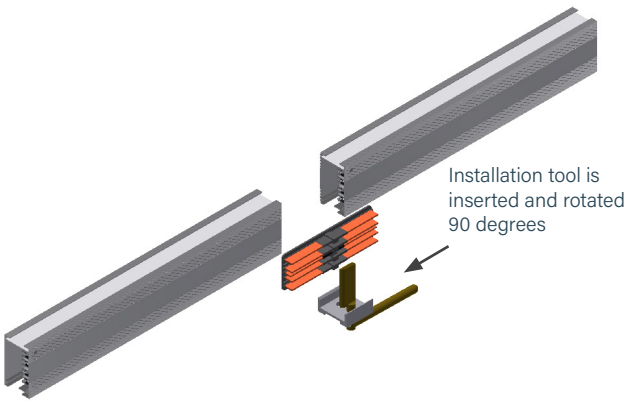
An installation tool is used to install the bus connector between two adjacent sections of busway. A joint kit, which is comprised of two housing couplers and a bus connector set, is required at every joint.

Busway sections are butted together and the top housing coupler is installed. The bus connector is inserted, centered and seated in the slot of the busway. The installation tool is inserted into the jointed intersection and rotated 90 degrees to form a spring-loaded, secure electrical connection. The housing coupler is then positioned over the bottom joint and tightened.

Weight 1.1 kg

Part Number (for all T3 systems)
ST3IT
No available colors





T3 SERIES

SERVICES

Regular servicing of busway systems is crucial for ensuring that your system performs at its best. By conducting regular maintenance, you can identify and address any potential issues before they turn into expensive problems, thus saving you time and money in the long run. Regular servicing can help extend the lifespan of your busway system, ensuring that it meets safety standards and complies with regulations. Choose from various offerings and customize a service plan that works best for you.

WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:

COMMISSIONING AND EQUIPMENT RENTALS

Designing a mission-critical facility involves a significant investment of time and money. Through comprehensive commissioning services, Starline can help guarantee your project delivers the outcomes you expect.

Whether you need rental equipment to test your busway system or certified technicians to perform the testing, Starline has you covered. Choose from our inventory of load bank tap-offs and associated gear, or work with a Starline Engineer to customize and perform a commissioning plan to fit your specific needs.

METER SERVICES

Starline's certified technicians make optimizing your meters' performance and functionality a breeze. Our comprehensive on-site meter programming service includes inspecting, programming, reporting, and optional retrofitting services for you existing systems.

STARTUP AND SYSTEM CERTIFICATION

At Starline, we are committed to ensuring the success of your project. Our team understands the risks associated with the energization of systems, which is why we've designed a rigorous certification process to inspect, test and report on your Starline Busway and Critical Power Monitor ("CPM") products. Our certification process proactively identifies and prevents any potential issues before they happen.

To ensure the long-term success of your project, it is crucial to have Starline-certified technicians inspect and validate the installation before full commissioning. Level 2 and 3 commissioning ensures the installation complies with safety requirements and meets factory standards for ongoing reliability.

- Double the length of the standard factory warranty
- Ensure all joint and feed connections are properly installed with continuity testing
- Ensure proper installation of all plug-in units
- Validate that system will perform to your specified requirements
- Full certification report delivered electronically at conclusion of service

TURNKEY INSTALLATION SERVICES

Our trained and factory certified Busbar installers are looking forward to completing your next job. You can order your best-in-class power distribution system and leave the rest to us. Our technicians will complete your installation quickly and safely and will reduce your overall TCO by extending your product warranty.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.

T3 SERIES

SERVICES

PREVENTATIVE MAINTENANCE PLANS AND IR SCANNING

Although Starline busway is expertly designed to require less maintenance, NETA ATS and MTS guidelines recommend conducting annual inspections and health assessments on all critical equipment. Yearly preventative maintenance helps to ensure your system's long-term reliability and safety.

Starline's FLIR-certified technicians will create a custom preventative maintenance plan for your specific needs. Our certified technicians will work to:

- Identify thermal anomalies
- Extend equipment lifecycle
- Ensure optimal system performance
- Improve facility safety and operational sustainability

Upon completing your preventative maintenance plan, you may be eligible to extend your product warranty.

ON-SITE INSTALLATION SUPPORT

Starline's on-site installation service makes installing your busway as quick and easy as possible.

Our installation support starts with scheduling a preliminary trip to the installation site. During the initial visit, our certified technicians will train your installing contractor and develop a thorough installation and commissioning plan.

After completing the training, your installing contractor will have a direct line of communication with our installation experts. Our experts can help answer questions and provide hands-on guidance when needed.

Opting for Starline's installation support helps mitigate the installation risk and reduces the learning curve typically associated with new installations.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services.**

T3 SERIES

SERVICES

ON-SITE PRODUCT TRAINING

At Starline, we offer comprehensive on-site product training services facilitated by our team of certified technicians. With their extensive expertise and commitment to upholding our high factory standards, you can confidently rely on them to ensure your and your systems' reliability and operational safety.

Our training programs equip your team with the knowledge and skills necessary to operate and maintain your systems effectively. Through hands-on demonstrations and interactive sessions, our certified technicians will guide your staff in understanding the intricate workings of the products and address any questions or concerns your team may have during the training process.

By choosing our on-site product training services, you are investing in your system's and operations' long-term success.

RECERTIFICATION AND EXTENDED WARRANTY PLANS

Starline's recertification and extended warranty options provide best-in-class coverage for all of your Starline products and systems. Our extended warranty plans safeguard your investment beyond the standard warranty timeframe, offering you peace-of-mind while our recertification programs help mitigate risk and downtime. Whether the busway has been installed for years or you are relocating to another building, Starline is here to help.

Choose from one of our flexible one to four-year plans or have your system recertified anytime. Contact your Starline rep for more information.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services.**

T5 SERIES

T5 SPECS & INTRODUCTION

SPECS

This specification covers the electrical characteristics and general requirements for a track busway system, hereafter referred to as (Track Busway or busway). The system is designed primarily for overhead distribution of electrical power; supporting designated work areas and equipment. Once installed, the busway provides a simple, versatile, fast and economic means of distributing power. Loads fed from a variety of plug-in units can be easily added or removed without shutting power down to the busway.

Track Busway is designed, manufactured and conforms to the following standards:
IEC 61439-1, 61439-6
CCC GB7251.6-2015
CSA C22.2 No. 27
NMX-J-148-1998-ANCE
UL 857, Ed. 13
Low Voltage Directive - 2014/35/EC
RoHS Directive - 2011/65/EU

*All standards and certifications available upon request

INTRODUCTION

Starline is the leader in electrical power distribution in the mission critical, commercial and light industrial applications with Starline Track Busway. This system was designed to meet the rugged specification of IEC 61439, General Rules & Busway Trunking Systems, with the flexible features of track lighting - and is available in systems with 250, 400, 630, 800, 1000 & 1250 amps with case, dedicated or isolated earth.

Track Busway is the simple, versatile, fast and economical solution for supplying power to electrical loads and is unique because the busway can be instantly tapped at any location, with a variety of plug-in units.

The Product Selection Guide was developed to help the design engineer understand and consider all of the options available with Starline Track Busway when designing a system.

This guide is all-inclusive; however, Starline excels at collaborating with design engineers to provide solutions for any application. If you have a need that is not found in this guide, please contact us at **1-800-245-6378** or email us at **info@starlinepower.com**. We will be happy to answer your questions over the telephone or schedule a visit with one of our local representatives.

Also, if viewing this guide in print, please keep in mind that this is a working document. Starline reserves the right to change information and descriptions of listed services and products. The latest version of this guide is available for download at **downloads.starlinepower.com**.

INTERNATIONAL BUSWAY (GLOBAL VS. METRIC)

Starline Track Busway Global series has been specifically designed and manufactured to meet IEC 61439-1 and IEC 61439-6 international standards for busway trunking systems. The Global busway system is lighter, more compact, and is compatible with Starline's fully customizable T5 tap-off units.

Starline's Metric series is a robust busway that meets the requirements of both UL 857 and IEC 61439-1,6. It carries industry leading short-circuit capabilities and electrical ratings.

Both systems can be specified utilizing this selection guide.

T5 SERIES

T5 TABLE OF CONTENTS

T5 SERIES

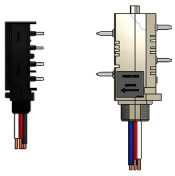
T5 TABLE OF CONTENTS

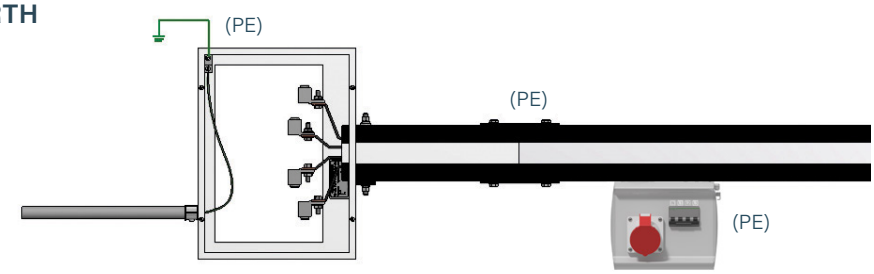
T5 SERIES

EARTH/GROUND OPTIONS

CASE GROUND/CHASSIS EARTH

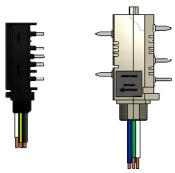
Uses aluminum housing and no extra copper bar.

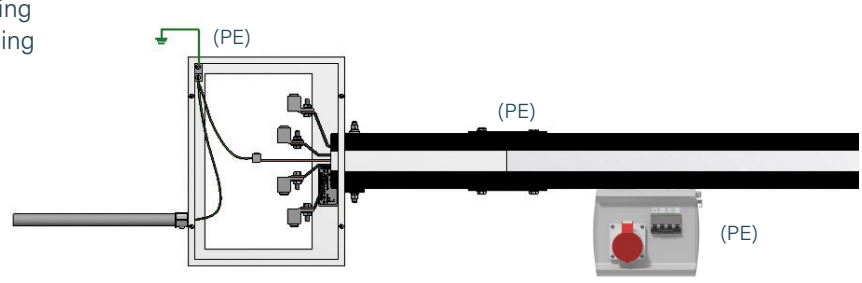




DEDICATED GROUND/EARTH

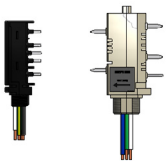
Extra bar in busway for ground. Everything tied together inside plugs. Bar and housing at same potential.

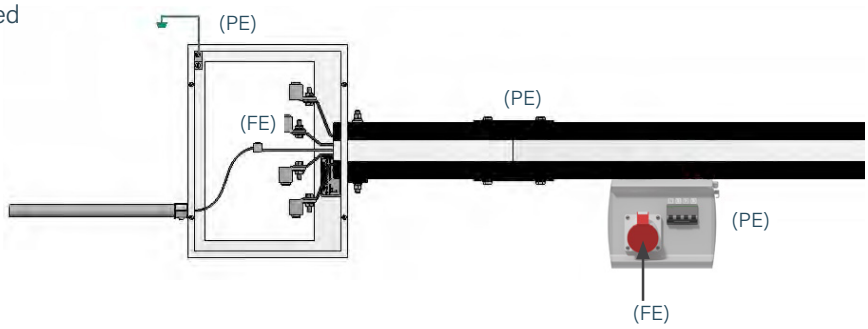




ISOLATED GROUND/EARTH

Orange receptacles in plugs. Case ground isolated from copper ground bar. Isolated ground carried back to panel by others.





*For further details about Dedicated Earth vs. Isolated Earth, please reference our “Metric: Isolated Earth (IG) vs. Dedicated Earth (DG)” tech brief on **downloads.starlinepower.com**

T5 SERIES

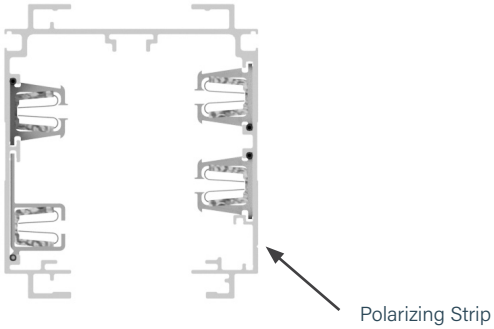
POLARITY TIPS

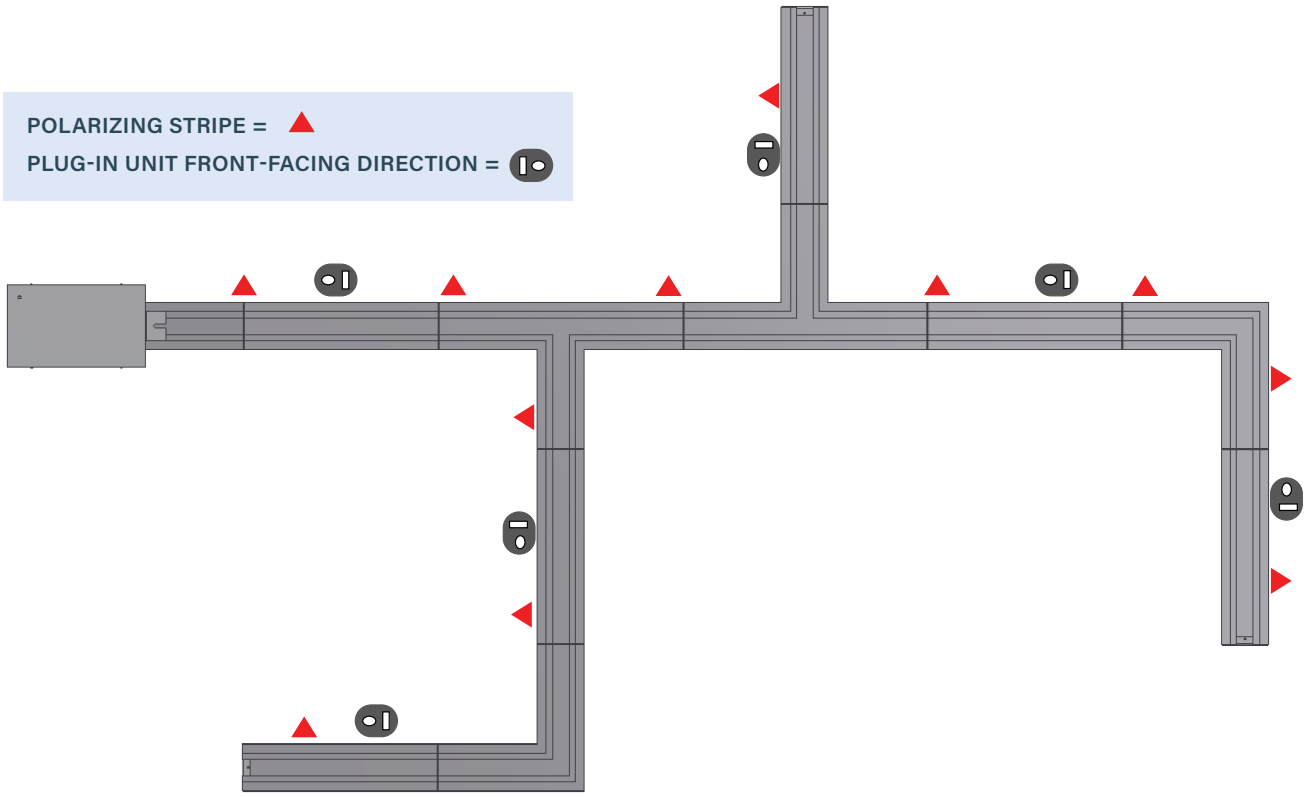
Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

It is particularly important to understand this design concept prior to ordering and/or installing some components.

For example, if the face direction of a Starline plug-in unit is important in your installation consider that they will always face the polarizing strip side. Certain plug-in units are 'reversible', designated by 'R', to face devices away from the conductor side.

A standard plug-in unit will always face the polarizing strip





T5 SERIES

SYSTEM LAYOUT TIPS

POWER FEEDS

Determine location of power feeds based on relation to power source, existing feeders and voltage drop concerns for longer runs.

SUPPORT HARDWARE

Support hardware is spaced no more than 3 meters apart. Refer to **page 4.82** for support hardware details. Contact your local Starline applications engineer for any questions.

INSTALLATION

Printed installation drawings are supplied with each system shipment and they are also available for download online at **downloads.starlinepower.com**. CAD and BIM files of these drawings are also available by contacting your local Starline applications engineer.

BUSWAY HOUSING SECTIONS

Standard busway lengths are available in 1.5 meter, 3 meter, and 6 meter increments (except for 800T5, 1000T5 and 1250T5 where the max length is 3 meters). Although the factory can cut individual Starline Track Busway sections to any length under 6 meters, it is highly recommended to keep all layout runs in increments of 1.5 meters to simplify layout and installation.

BUSWAY TEES AND ELBOWS SECTIONS

Try to keep all runs as straight as possible as tees and elbows are added cost. Pay close attention to polarity on the elbows. The polarity will need to match the adjacent busway section(s) to be compatible.

T5 SERIES

COMPONENT RELATIONSHIP TIPS

When ordering material, it is important to understand the relationship between various components.

EXAMPLES

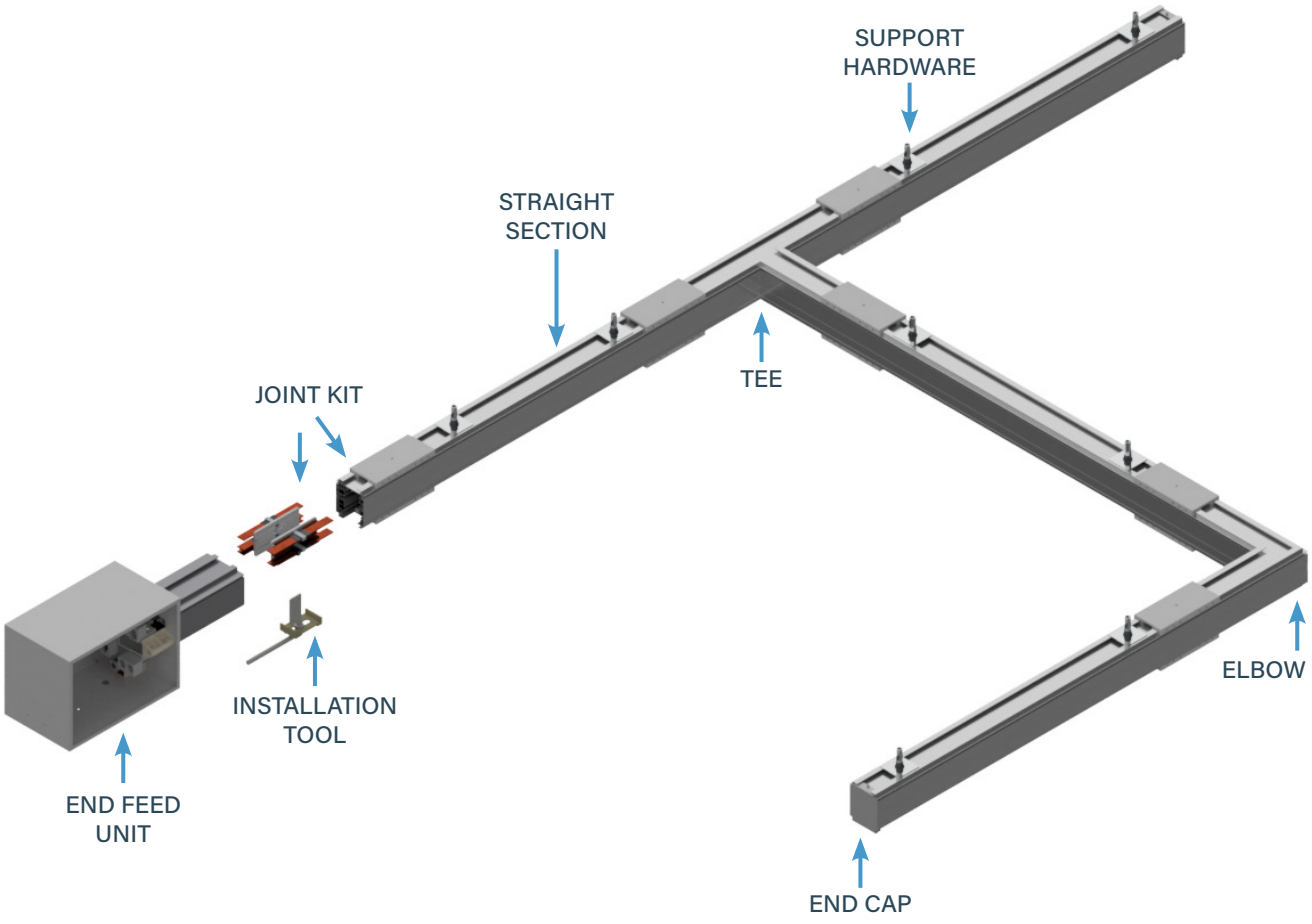
- The T5 series of plug-in units are compatible with all T5 busway systems
- Each piece of housing (straights and elbows) requires a joint kit (containing two housing couplers and one bus connector). Determine the total number of housing sections (regardless of length) as this becomes the number of joint kits that will be needed.
    - Add one extra joint kit for each tee section
- If this is your first installation for T5 systems, you will need to order an installation tool (ST5IT).

General support hardware rule to follow:

- 3 meter maximum spacing between supports and we recommend 10% more than the required quantity to cover potential layout changes. Seismic mounts and supports will differ from the standard. Please consult the factory for details.
- Total power feeds and end caps can be determined by counting the total number of unconnected runs.
- Before specifying or ordering elbow or tee connectors, it is important to understand polarity and the relationship to direction of outlets. Please refer to **page 4.4** Polarity Tips for more detail.

250T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

For further information on applicable T5 plug-in unit options, please consult the factory.

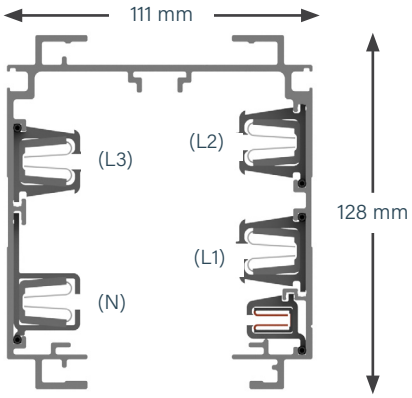
250T5 SYSTEMS

STRAIGHT SECTIONS

PRODUCT DESCRIPTION

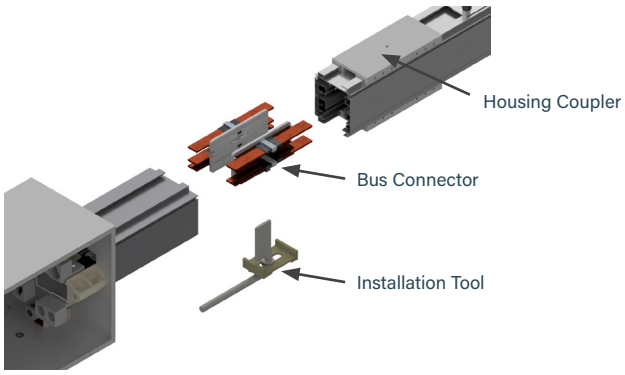
Track Busway straight sections consist of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a protective earth. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 4-pole varieties, optional isolated or dedicated earth, optional oversize (200%) neutral. The housing sections join together using bus connectors which fit into the channels of the adjoining section. An installation tool is used to force the blades into the busbar channels for a maintenance-free, "spring-pressure" electrical connection.

GLOBAL & METRIC SYSTEM



MATERIAL
Extruded Aluminum
RATINGS
100% Protective Earth 250 Amps 250T5C4/250T5CG: 415 Volt 250T5CN/250T5CF: 415 Volt
LENGTH
3 m, 6 m; or custom lengths between .6 - 6 m
GLOBAL SYSTEM WEIGHT
3 m 4 pole: 18.6 kg 3 m 4 pole w/ ground: 20.9 kg 3 m 4 pole w/ 200% N: 21.3 kg 3 m 4 pole w/ ground & 200% N: 23.1 kg
METRIC SYSTEM WEIGHT
3 m 4 pole: 21.3 kg 3 m 4 pole w/ ground: 23.6 kg 3 m 4 pole w/ 200% N: 24.7 kg 3 m 4 pole w/ ground & 200% N: 26.5 kg

METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow



250T5 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

G	S	250	T5	C	4	S	–	M100	C	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Straight Length	9. Busway Access		10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

G	Global	**M**	Metric

2. Product Type *(section component)*

S	Straight Section

3. Product Frame *(maximum amperage)*

250	250 amps

4. Compatibility *(frame compatibility)*

T5	T5 Series	**K5**	T5 Series (Limiting Strip)

5. Material *(busbar material)*

C	Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S	Standard

8. Straight Length *(length of section)*

MXYY	X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C	Continuous

10. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

11. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**7**	Tape Factory Blue
3	Tape Factory Black	**8**	Tape Factory Green
4	Tape Factory White	**9**	Tape Factory Yellow
6	Tape Factory Red		

EXAMPLES

GS250T5C4S-M300C-STD0 = *Global System, Straight Section, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 3 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape Marking*

MS250T5CNS-M275C-BLU0 = *Metric System, Straight Section, 250 amps, T5 Series, Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization, 2.75 meter Straight Length, Continuous Busway Access, Painted Factory Blue, No Tape Marking*

250T5 SYSTEMS

ELBOW SECTIONS

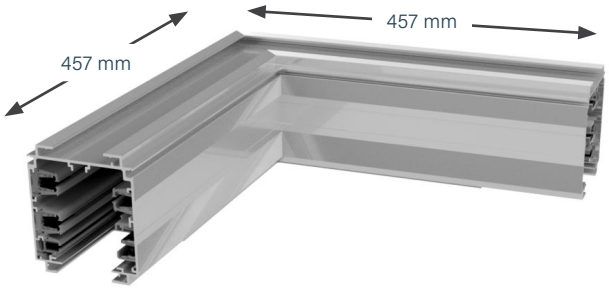
PRODUCT DESCRIPTION

An elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify right or left elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

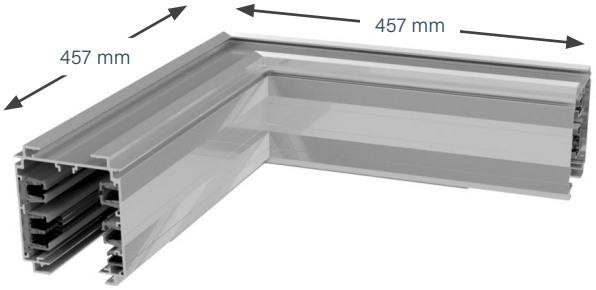
Connection Accessories
A joint kit (**page 4.85**) is used to make mechanical and electrical connections to adjacent busway sections. *(ordered separately)*

Global System Weight 6.6 kg

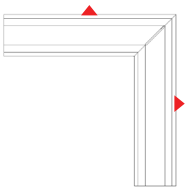
Metric System Weight 7.2 kg



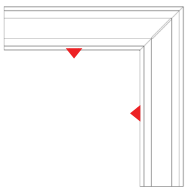
EXTERNAL ELBOW



INTERNAL ELBOW



External Elbow



Internal Elbow

▲ = Polarizing Stripe

250T5 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

G	E	250	T5	C	4	S	–	IN	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

G	Global	**M**	Metric

2. Product Type *(section component)*

E	Elbow Section

3. Product Frame *(maximum amperage)*

250	250 amps

4. Compatibility *(frame compatibility)*

T5	T5 Series	**K5**	T5 Series (Limiting Strip)

5. Material *(busbar material)*

C	Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S	Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN	Internal	**EX**	External
HN	Seismic Internal	**GX**	Seismic External

9. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

10. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**7**	Tape Factory Blue
3	Tape Factory Black	**8**	Tape Factory Green
4	Tape Factory White	**9**	Tape Factory Yellow
6	Tape Factory Red		

EXAMPLES

GE250T5C4S-IN-BLU4 = *Global System, Elbow Section, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Black, Factory White Tape Marking*

ME250T5CGS-EX-STD0 = *Metric System, Elbow Section, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral plus Isolated/Dedicated Ground, Standard Polarization, External Turning Direction, Factory Mill Finish, No Tape Marking*

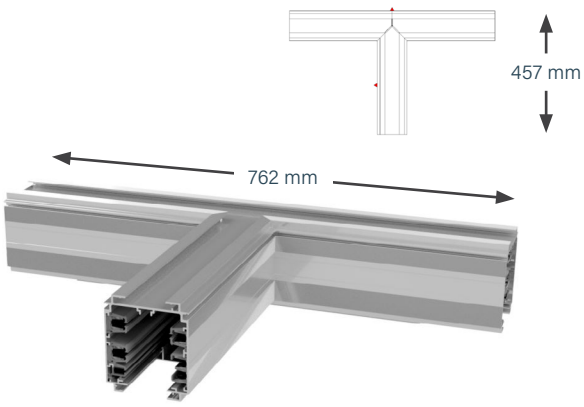
250T5 SYSTEMS

TEE SECTIONS

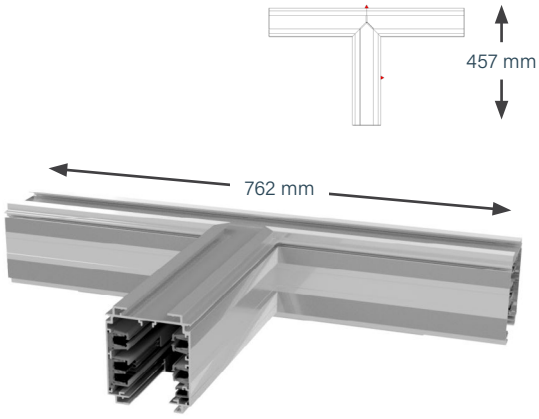
PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. external tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a housing section and tee section of busway.

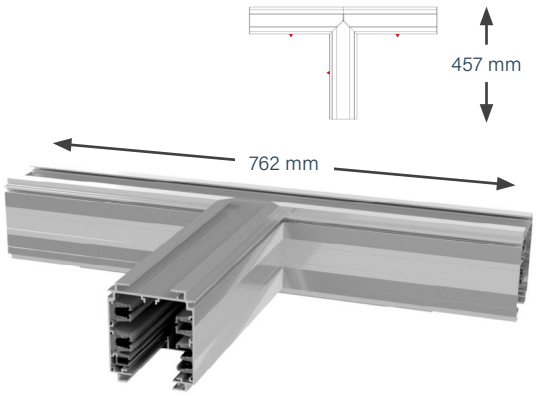
Global System Weight 8.8 kg
Metric System Weight 9.5 kg



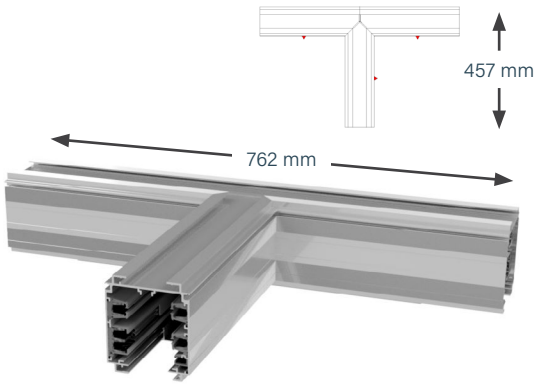
EXTERNAL-LEFT (EL)



EXTERNAL-RIGHT (ER)



INTERNAL-LEFT (IL)



INTERNAL-RIGHT (IR)

▲ = Polarizing Stripe

250T5 SYSTEMS

TEE SECTIONS: PRODUCT NUMBERS

G	T	250	T5	C	4	S	–	IR	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

G Global **M** Metric

2. Product Type *(section component)*

T Tee Section

3. Product Frame *(maximum amperage)*

250 250 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

N 3 Phase plus 200% Neutral

F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IL Internal-Left
IR Internal-Right
HL Seismic Internal-Left
HR Seismic Internal-Right
EL External-Left
ER External-Right
GL Seismic External-Left
GR Seismic External-Right

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

GT250T5C4S-IR-RED0 = *Global System, Tee Section, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking*

MT250T5CFS-EL-STD7 = *Metric System, Tee Section, 250 amps, T5 Series, Copper Conductor, 3 Phase plus 200% Neutral plus Isolated/Dedicated Ground, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, Factory Blue Tape Marking*

250T5 SYSTEMS

END FEED UNITS

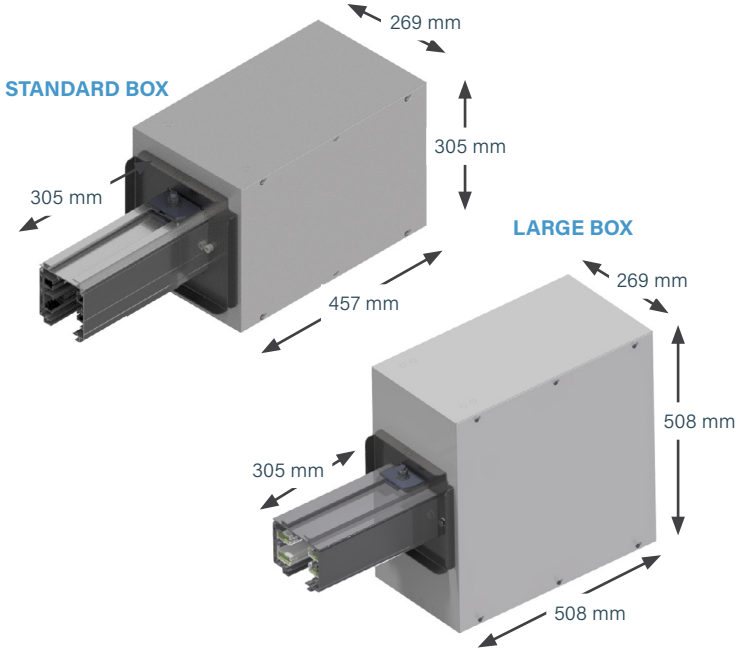
PRODUCT DESCRIPTION

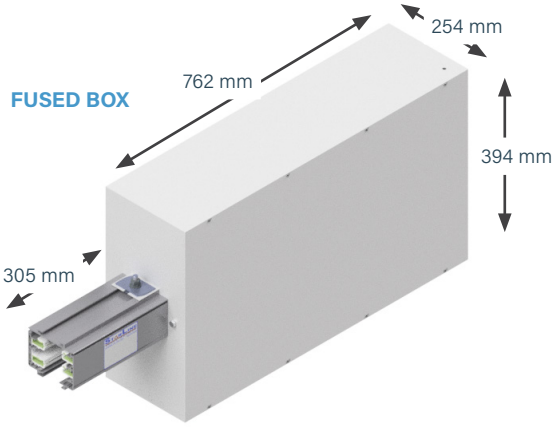
End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 305 millimeter section of busway. The assembly includes connection lugs and a ground lug for wires up to 150 mm^2 for standard size boxes and large size boxes.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector *(ordered separately)*.

Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Global System Weight *(for standard size end feed)* 15 kg
Metric System Weight *(for standard size end feed)* 15.2 kg



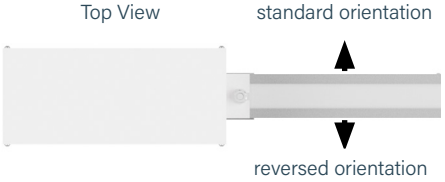


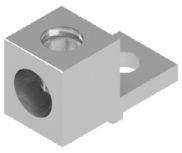
	BOXES		
LUGS	Standard	Large	Fused
Standard	**S**	**L**	**F**
Double			
Bolt*	**B**	**R**	

Box size and Lug options: Refer to option 8. Lug/Box Options on ***page 4.17***
End Feed Units: Product Numbers

**Bolt options include bolt, washer, nut.*
Lug not included.

Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com





STANDARD "S"/"L"

BOLT "B"/"R"

250T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

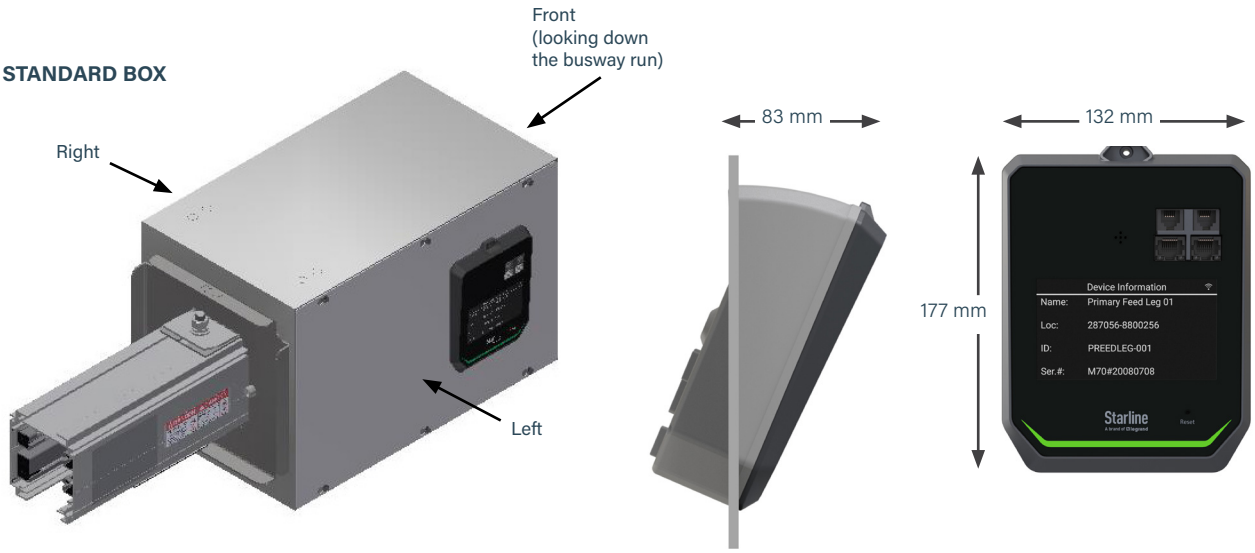
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX



*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 4.17** *End Feed Units: Product Numbers).*

250T5 SYSTEMS

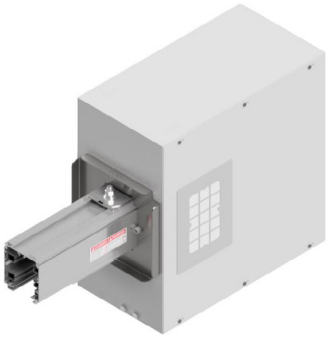
END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

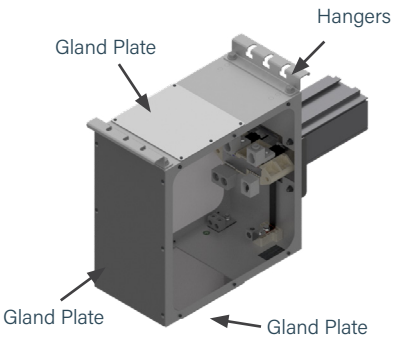
When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T5); IP54 (S5)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5" (127mm) x 7" (178mm)
End Feeds: 630A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 4.18** End Feed Units: Product Numbers)*
*(Refer to option 10. Accessories Package on **page 4.17** End Feed Units: Product Numbers)*

250T5 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

G	F	250	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

G Global
M Metric

2. Product Type *(section component)*

F End Feed

3. Product Frame *(maximum amperage)*

250 250 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor
N 3 Phase plus 200% Neutral
F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard
R Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box
L Standard lugs, Large box
B Bolt Lugs, Standard box
F Standard lugs, Fused box
R Bolt lugs, Large box

9. Meter Location *(from the terminal, side with removable lid)*

R Right
N None (N/A)
L Left

10. Accessories Package *(optional accessories for feed units)*

S Standard
C IR Window - Circular
F End Feed Hanger & Gland Plates
G Starline Rect. IR window, 5" (127mm) x 7" (178mm)
B (C+F)
I (G+F)

11. Accessories Location *(from the terminal, side with accessory)*

N None (N/A)
L Left
R Right
F Front (consult the factory)

12. Straight Length *(length of section)*

M030 .3 meters *(For other lengths, consult the factory)*

13. Busway Access

C Continuous

14. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

15. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLE

GF250T5C4R-LRGL-M030C-BLK0 = *Global System, End Feed, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking*

250T5 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

G	F	250	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*18. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

M73
(2) RJ11, (2) RJ45, Lg. Display

M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

GF250T5C4R-LRGL-M030C-BLK0-M73001 = *Global System, End Feed, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral.*

250T5 SYSTEMS

ABOVE FEED UNITS

PRODUCT DESCRIPTION

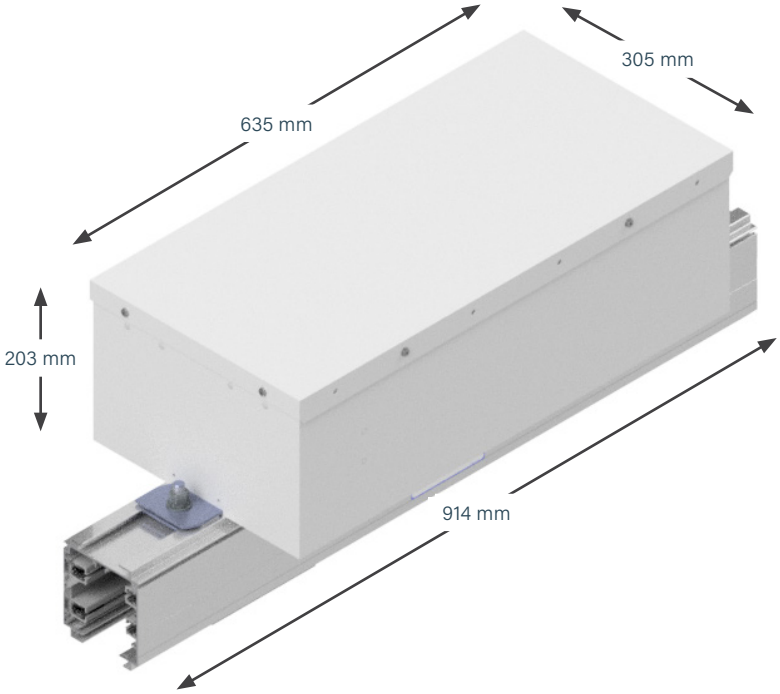
The above feed power unit supplies power from the topside of the busway. Factory assembled unit consists of a 635 x 305 x 203 millimeter steel junction box that is mounted on top of a 914 millimeter section of busway.

*914 millimeter is the minimum and standard length of busway that an above feed is provided with.

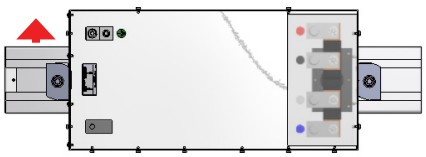
Above feed units can be placed at the end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

Weight 20.6 kg

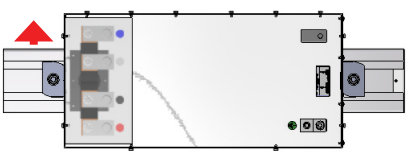
*Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on **downloads.starlinepower.com.**



Standard (S)



Reversed (R)



250T5 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

G	A	250	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M100	C	050	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

1. System *(standard of measure)*

G Global **M** Metric

2. Product Type *(section component)*

A Above Feed

3. Product Frame *(maximum amperage)*

250 250 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

N 3 Phase plus 200% Neutral

F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard **R** Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box

9. Meter Location *(from the terminal, side with removable lid)*

R Right **L** Left **N** None (N/A)

10. Accessories Package *(optional accessories for feed units)*

S Standard

11. Accessories Location *(from the terminal, side with removable lid)*

N None (N/A) **R** Right **A** Rear
L Left **T** Top **F** Front

12. Straight Length *(length of section)*

M100 1 meter

13. Busway Access *(how plugs access the busway)*

C Continuous

14. Feed Location *(location of the center of the top feed)*

050 50 centimeters *(For other lengths, consult the factory)*

15. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish **RED** Paint Factory Red
BLK Paint Factory Black **BLU** Paint Factory Blue
WHT Paint Factory White ****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

16. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking **7** Tape Factory Blue
3 Tape Factory Black **8** Tape Factory Green
4 Tape Factory White **9** Tape Factory Yellow
6 Tape Factory Red

EXAMPLE

GA250T5CFS-SLSN-M100C050-STD0-M73001 = *Global System, Above Feed, 250 amps, T5 Series, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location, 1 meter Straight Length, Continuous Busway Access, 50 centimeter Feed Location, Painted Factory Silver, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

250T5 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

G	A	250	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M100	C	050	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

*17. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*17. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*18. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*19. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*19. System Configuration and CT Type *(M70 DC)*

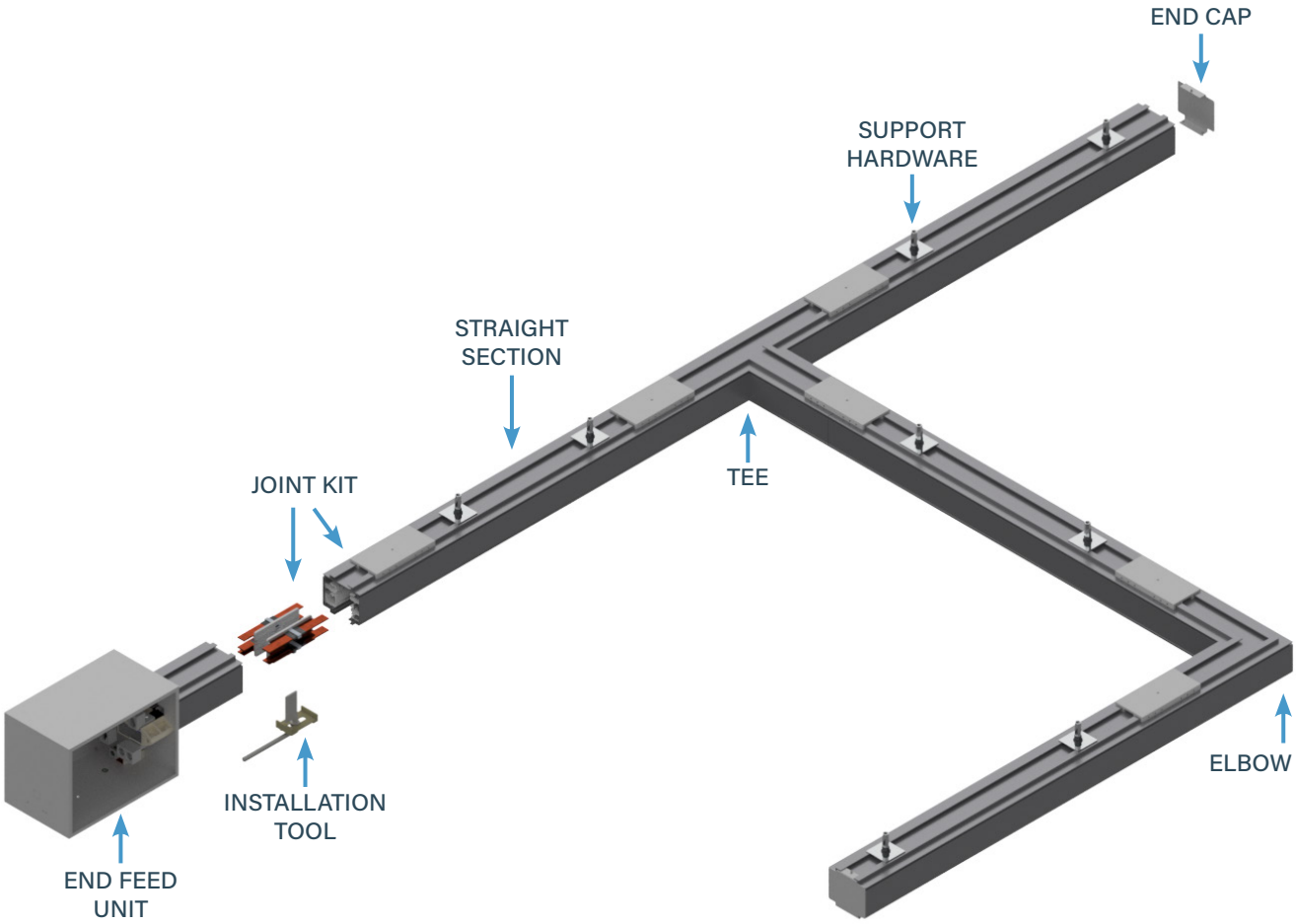
J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

EXAMPLE

GA250T5CFS-SLSN-M100C050-STD0-M73001 = *Global System, Above Feed, 250 amps, T5 Series, Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location, 1 meter Straight Length, Continuous Busway Access, 50 centimeter Feed Location, Painted Factory Silver, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

400T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

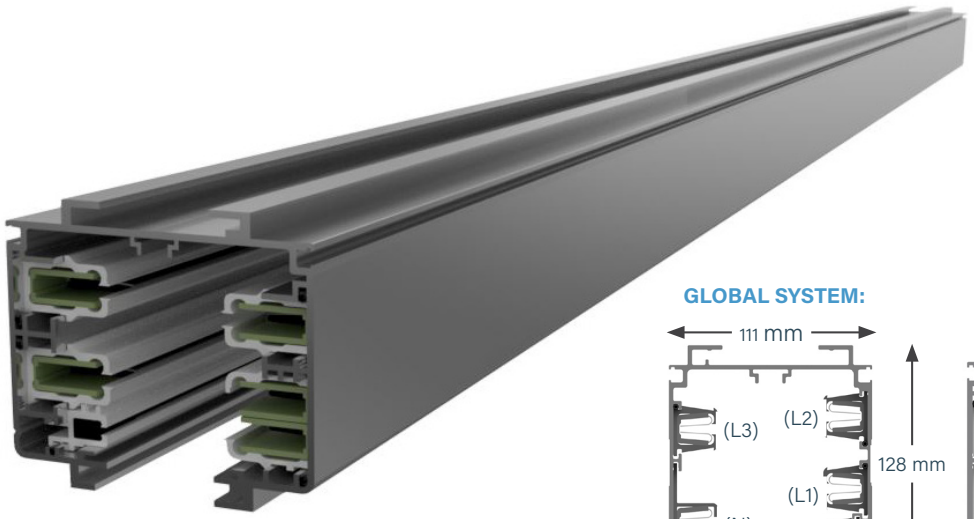
For further information on applicable T5 plug-in unit options, please consult the factory.

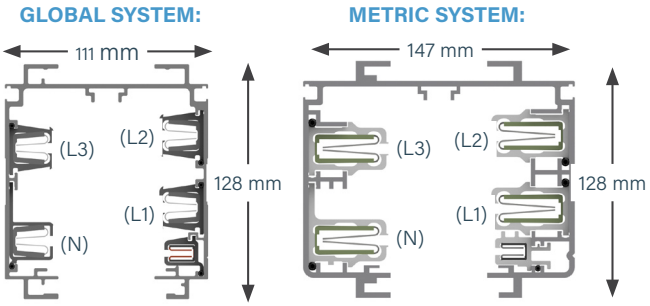
400T5 SYSTEMS

STRAIGHT SECTIONS

PRODUCT DESCRIPTION

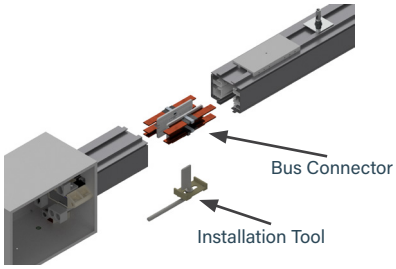
Track Busway straight sections consist of an extruded aluminum shell with "spring-pressure" type copper channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% earth path. Each housing has a continuous access slot over its entire length for the insertion of turn-n-lock plug-in units. Housing configurations include 4-pole varieties, optional isolated ground, optional oversize (200%) neutral. The straight sections join together using bus connectors which fit into the channels of the adjoining section. An installation tool is used to force the blades into the busbar channels for a maintenance-free "spring-pressure" electrical connection.





MATERIAL
Extruded Aluminum
RATINGS
100% Protective Earth 400 Amps 400T5C4/400T5CG: 415 Volt 400T5CN/400T5CF: 415 Volt
LENGTH
3 m, 6 m; or custom lengths between .6 - 6 m
WEIGHT
Global System 3 m 4 pole: 21.3 kg 3 m 4 pole w/ ground: 23.6 kg 3 m 4 pole w/ 200% N: 24.7 kg 3 m 4 pole w/ ground & 200% N: 26.5 kg **Metric System** 3 m 4 pole: 43 kg 3 m 4 pole w/ ground: 45.4 kg 3 m 4 pole w/ 200% N: 49.9 kg 3 m 4 pole w/ ground & 200% N: 54.4 kg

METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow



400T5 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

G	S	400	T5	C	4	S	–	M100	C	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Straight Length	9. Busway Access		10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

G Global **M** Metric

2. Product Type *(section component)*

S Straight Section

3. Product Frame *(maximum amperage)*

400 400 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

N 3 Phase plus 200% Neutral

F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Straight Length *(length of section)*

MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish*
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

11. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

GS400T5C4S-0500C-STD0 = *Global System, Straight Section, 400 amps, T5 Series, Copper Conductor, 3 phase plus Neutral, Standard Polarization, 5 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape Marking*

MS400K5CNS-M450C-P013 = *Metric System, Straight Section, 400 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus 200% Neutral, Standard Polarization- 4.5 meter Straight Length, Continuous Busway Access, Painted RAL 1001, Factory Black Tape Marking*

400T5 SYSTEMS

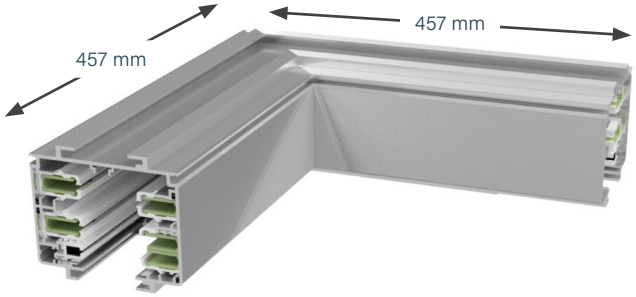
ELBOW SECTIONS

PRODUCT DESCRIPTION

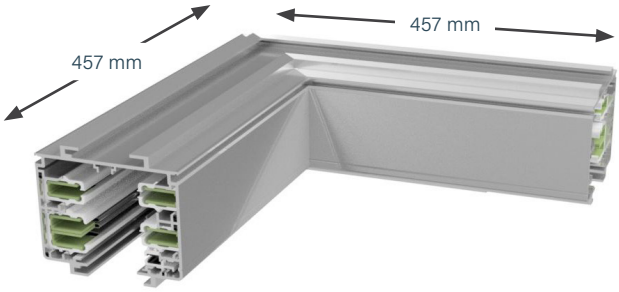
An elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories
Joint kits (**page 4.85**) are used to make mechanical and electrical connections to adjacent busway sections *(ordered separately)*.

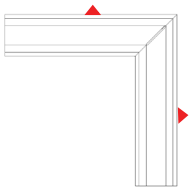
Global System Weight 7.2 kg
Metric System Weight 12.7 kg



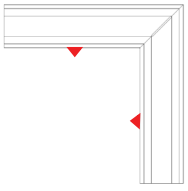
EXTERNAL ELBOW



INTERNAL ELBOW



External Elbow



Internal Elbow

▲ = Polarizing Stripe

400T5 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

G	E	400	T5	C	4	S	–	IN	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

G	Global	**M**	Metric

2. Product Type *(section component)*

E	Elbow Section

3. Product Frame *(maximum amperage)*

400	400 amps

4. Compatibility *(frame compatibility)*

T5	T5 Series	**K5**	T5 Series (Limiting Strip)

5. Material *(busbar material)*

C	Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S	Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN	Internal	**EX**	External
HN	Seismic Internal	**GX**	Seismic External

9. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 4.81)*

**Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

10. Tape Marking *(colored tape on both sides of busway housing)*

0	No Tape Marking	**7**	Tape Factory Blue
3	Tape Factory Black	**8**	Tape Factory Green
4	Tape Factory White	**9**	Tape Factory Yellow
6	Tape Factory Red		

EXAMPLES

GE400K5C4S-IN-PJ70 = *Global System, Elbow Section, 400 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted RAL 5027, No Tape Marking*

ME400T5CGS-EX-STD3 = *Metric System, Elbow Section, 400 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Factory Mill Finish, Factory Black Tape Marking*

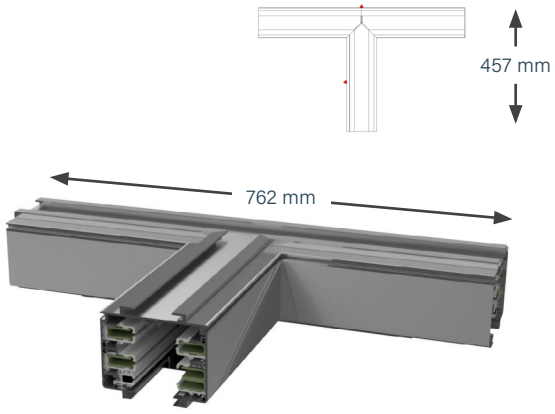
400T5 SYSTEMS

TEE SECTIONS

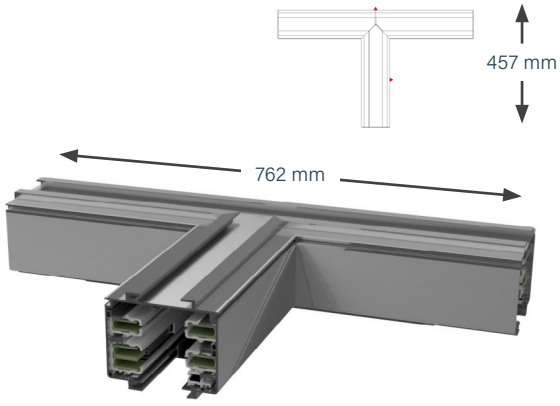
PRODUCT DESCRIPTION

Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a straight section and tee section of busway.

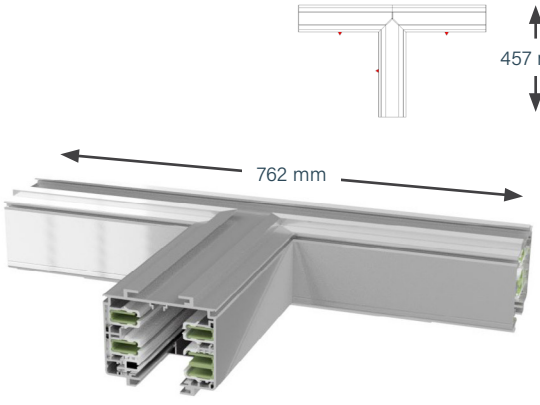
Global System Weight 9.5 kg
Metric System Weight 19 kg



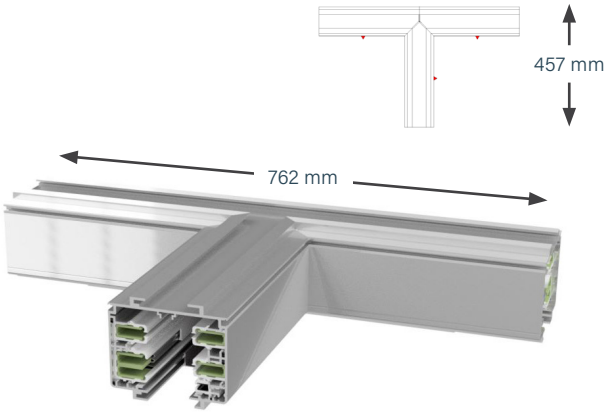
EXTERNAL-LEFT (EL)



EXTERNAL-RIGHT (ER)



INTERNAL-LEFT (IL)



INTERNAL-RIGHT (IR)

▲ = Polarizing Stripe

400T5 SYSTEMS

TEE SECTIONS: PRODUCT NUMBERS

G	T	400	T5	C	4	S	–	IR	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

G	Global	**M**	Metric

2. Product Type *(section component)*

T	Tee Section

3. Product Frame *(maximum amperage)*

400	400 amps

4. Compatibility *(frame compatibility)*

T5	T5 Series	**K5**	T5 Series (Limiting Strip)

5. Material *(busbar material)*

C	Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S	Standard

8. Turning Direction *(direction of section polarizing stripe)*

IL	Internal-Left	**EL**	External-Left
IR	Internal-Right	**ER**	External-Right
HL	Seismic Internal-Left	**GL**	Seismic External-Left
HR	Seismic Internal-Right	**GR**	Seismic External-Right

9. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

10. Tape Marking *(colored tape on both sides of busway housing)*

0	No Tape Marking	**7**	Tape Factory Blue
3	Tape Factory Black	**8**	Tape Factory Green
4	Tape Factory White	**9**	Tape Factory Yellow
6	Tape Factory Red		

EXAMPLES

GT400T5C4S-IR-RED0 = *Global System, Tee Section, 400 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking*

MT400K5CFS-EL-STD0 = *Metric System, Tee Section, 400 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Factory Mill Finish, No Tape Marking*

400T5 SYSTEMS

END FEED UNITS

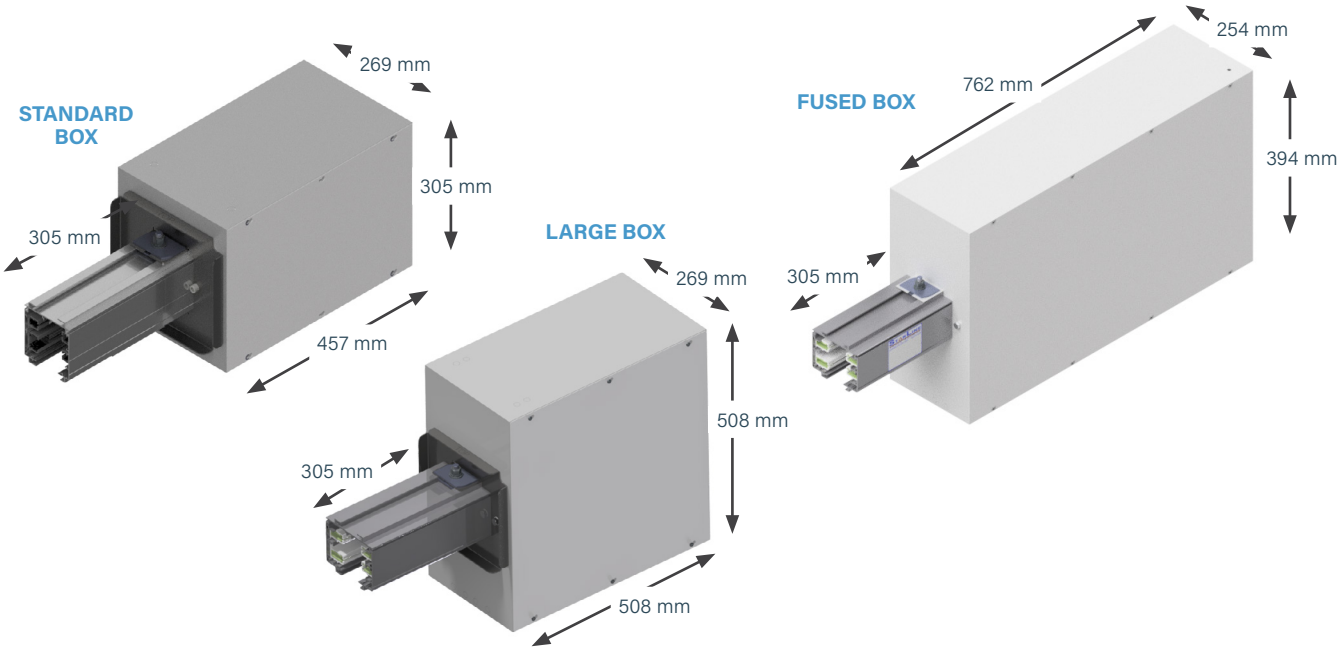
PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a .3 meter section of busway. The assembly includes connection lugs and a ground lug for wires 120 mm^2 or up to 300 mm^2 for standard size boxes and large size boxes.

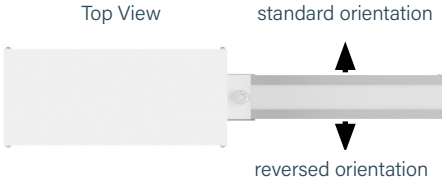
End power feed units are connected to adjacent busway sections using a housing coupler and bus connector *(ordered separately)*.

Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Global System Weight *(for standard size end feed)* 15.2 kg
Metric System Weight *(for standard size end feed)* 16.3 kg



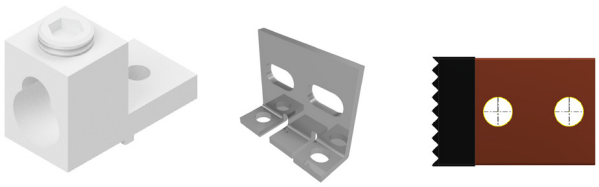
	BOXES		
LUGS	Standard	Large	Fused
Standard	**S**	**L**	**F**
Double			
Bolt*	**B**	**R**	



Box size and Lug options: Refer to option 8. Lug/Box Options on ***page 4.32***
End Feed Units: Product Numbers

**Bolt options include bolt, washer, nut.*
Lug not included.

Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com/starline/



METRIC "S" | GLOBAL BOLT "B"/"R" | METRIC "R"

400T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

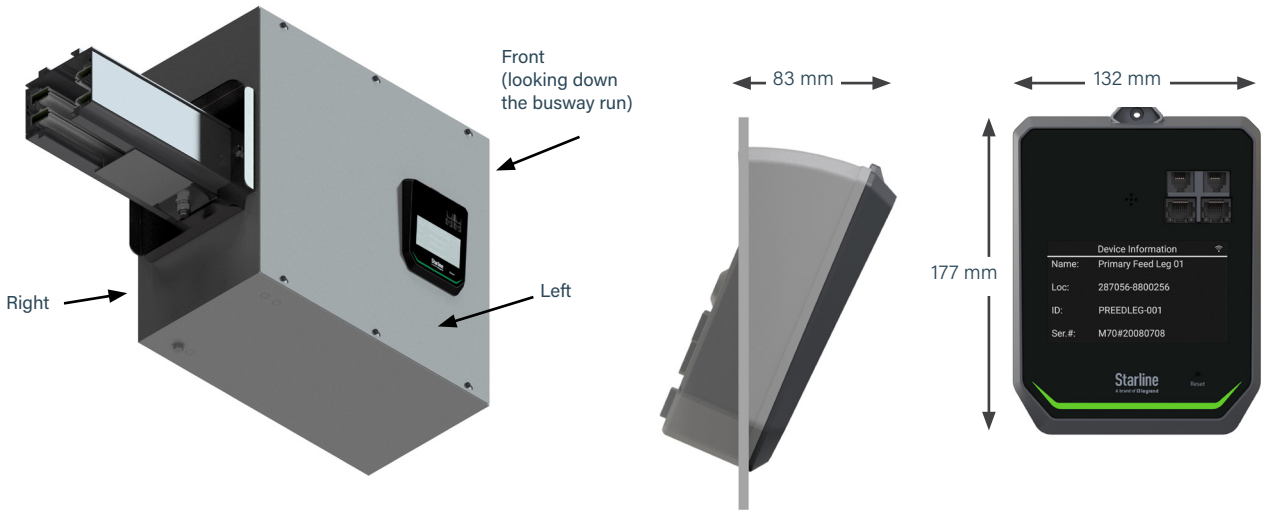
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX



*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 4.32** *End Feed Units: Product Numbers).*

400T5 SYSTEMS

END FEED UNITS: ACCESSORIES

IR WINDOWS

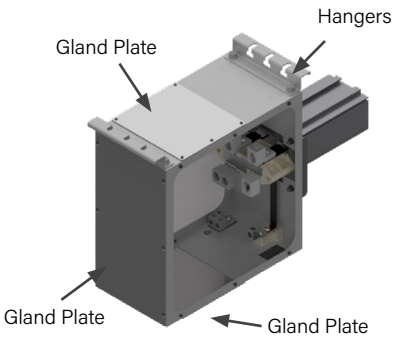
Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.

END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- Plug-in units have both Line & Load side IR windows for OCPD connections
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T5); IP54 (S5)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5" (127mm) x 7" (178mm)
End Feeds: 630A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 4.33** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 4.32** End Feed Units: Product Numbers)*

400T5 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

G	F	400	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

G	Global	**M**	Metric

2. Product Type *(section component)*

F	End Feed

3. Product Frame *(maximum amperage)*

400	400 amps

4. Compatibility *(frame compatibility)*

T5	T5 Series	**K5**	T5 Series (Limiting Strip)

5. Material *(busbar material)*

C	Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor
N	3 Phase plus 200% Neutral	**F**	3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S	Standard	**R**	Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S	Standard lugs, Standard box	**F**	Standard lugs, Fused box
L	Standard lugs, Large box	**R**	Bolt lugs, Large box
B	Bolt Lugs, Standard Box		

9. Meter Location *(from the terminal, side with removable lid)*

R	Right	**L**	Left
N	None (N/A)		

10. Accessories Package *(optional accessories for feed units)*

S	Standard
C	IR Window - Circular
F	End Feed Hanger & Gland Plates
G	Starline Rect. IR window, 5" (127mm) x 7" (178mm)
B	(C+F)
I	(G+F)

11. Accessories Location *(from the terminal, side with accessory)*

N	None (N/A)	**R**	Right
L	Left	**F**	Front (consult the factory)

12. Straight Length *(length of section)*

M030	.3 meters

13. Busway Access

C	Continuous

14. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

15. Tape Marking *(colored tape on both sides of busway housing)*

0	No Tape Marking	**7**	Tape Factory Blue
3	Tape Factory Black	**8**	Tape Factory Green
4	Tape Factory White	**9**	Tape Factory Yellow
6	Tape Factory Red		

EXAMPLE

GF400T5C4R-LRGL-M030C-BLK0 = *Global System, End Feed, 400 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking*

400T5 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

G	F	400	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*18. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

M73
(2) RJ11, (2) RJ45, Lg. Display

M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

GF400T5C4R-LRGL-M030C-BLK0-M73001 = *Global System, End Feed, 400 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

400T5 SYSTEMS

ABOVE FEED UNITS

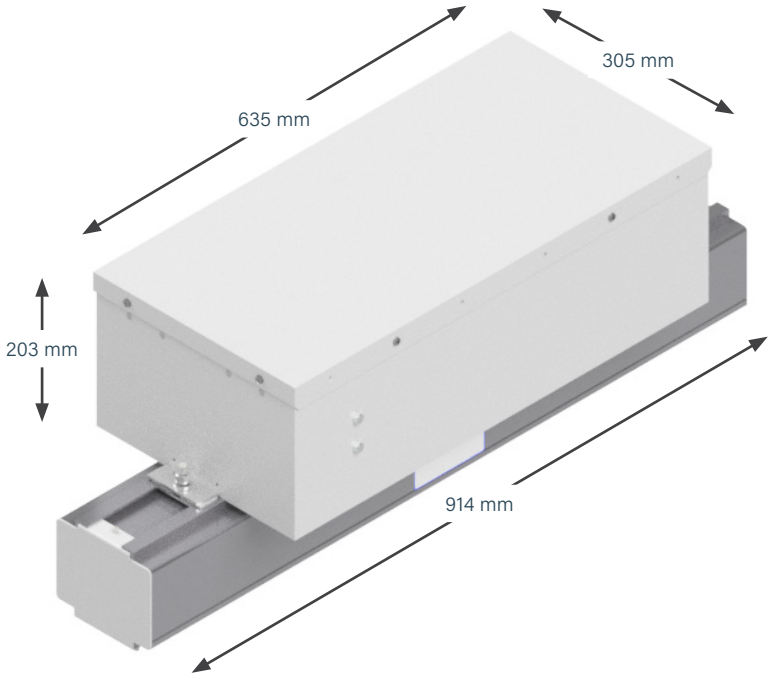
PRODUCT DESCRIPTION

The above feed power unit supplies power from the topside of the busway. Factory assembled unit consists of a 635 x 305 x 203 millimeter steel junction box mounted on top of a 914 millimeter section of busway.

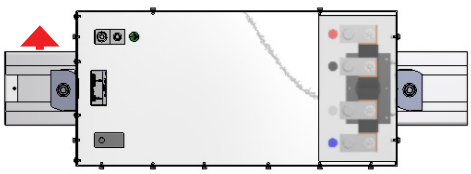
*914 millimeter is the minimum and standard length of busway that an above feed is provided with.

Above feed units can be placed at the end or anywhere along a busway run. Connections to adjoining busway sections are made by the standard means, requiring couplers and bus connectors which are sold separately.

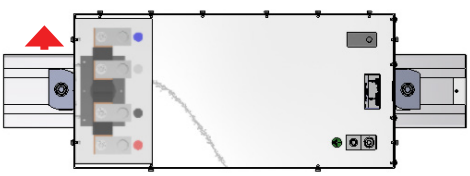
*Isolated or dedicated earth is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on **downloads.starlinepower.com.**



Standard (S)



Reversed (R)



400T5 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

G	A	400	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M100	C	050	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

1. System *(standard of measure)*

G Global **M** Metric

2. Product Type *(section component)*

A Above Feed

3. Product Frame *(maximum amperage)*

400 400 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

N 3 Phase plus 200% Neutral

F 3 Phase plus 200% Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard **R** Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box

9. Meter Location *(from the terminal, side with removable lid)*

R Right **L** Left **N** None (N/A)

10. Accessories Package *(optional accessories for feed units)*

S Standard

11. Accessories Location *(from the terminal, side with removable lid)*

N None (N/A) **R** Right **A** Rear
L Left **T** Top **F** Front

12. Straight Length *(length of section)*

M100 1 meter

13. Busway Access *(how plugs access the busway)*

C Continuous

14. Feed Location *(location of the center of the top feed)*

050 50 centimeters *(For other lengths, consult the factory)*

15. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish **RED** Paint Factory Red
BLK Paint Factory Black **BLU** Paint Factory Blue
WHT Paint Factory White ****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

16. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking **7** Tape Factory Blue
3 Tape Factory Black **8** Tape Factory Green
4 Tape Factory White **9** Tape Factory Yellow
6 Tape Factory Red

EXAMPLE

GA400K5CFS-SRSN-M100C050-STD0-M73001 = *Global System, Above Feed, 400 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, 1 meter Straight Length, Continuous Busway Access, 50 centimeter Feed Location, Painted Factory Silver, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

400T5 SYSTEMS

ABOVE FEED UNITS: PRODUCT NUMBERS

G	A	400	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M100	C	050	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access	14. Feed Location		15. Paint Color	16. Tape Marking		*17. Meter Release	*18. Meter Options	*19. System Config. and CT Type	

*17. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*17. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*18. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*19. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*19. System Configuration and CT Type *(M70 DC)*

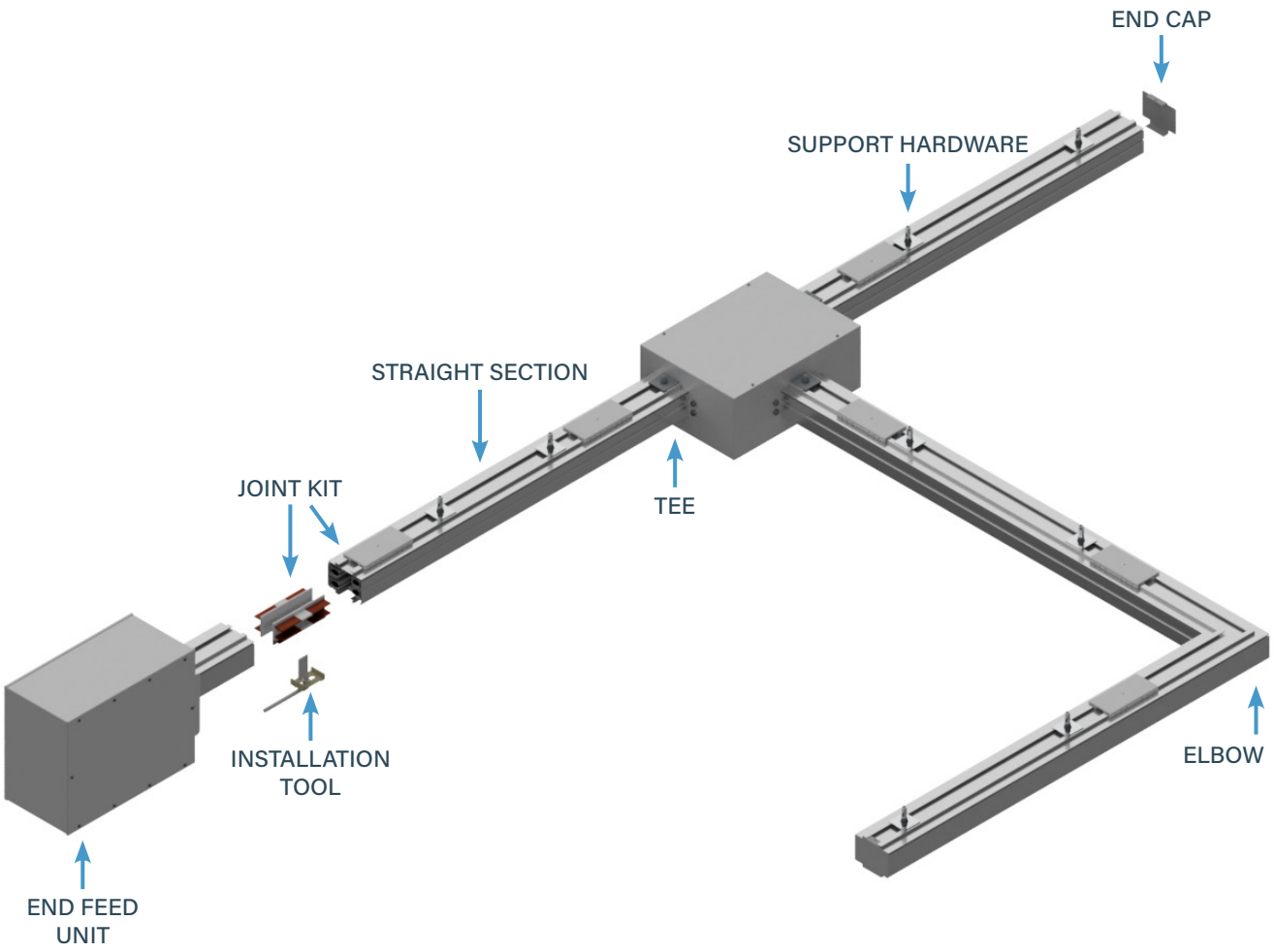
J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

EXAMPLE

GA400K5CFS-SRSN-M100C050-STD0-M73001 = *Global System, Above Feed, 400 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus 200% Neutral plus Internal Ground Conductor, Standard Polarization, Standard Lugs, Standard Box, Right Meter Location, Standard Accessory Package, No Accessory Location, 1 meter Straight Length, Continuous Busway Access, 50 centimeter Feed Location, Painted Factory Silver, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

630T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

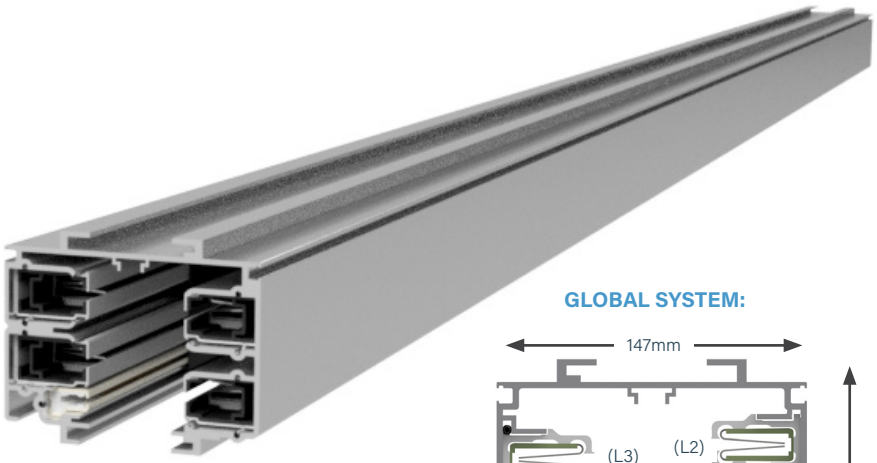
For further information on applicable T5 plug-in unit options, please consult the factory.

630T5 SYSTEMS

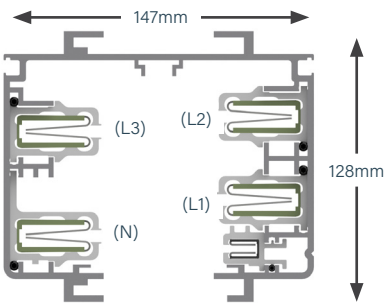
STRAIGHT SECTIONS

PRODUCT DESCRIPTION

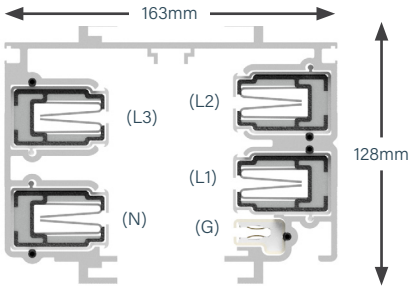
Track Busway straight sections consist of an extruded aluminum shell with you choice of copper or copper-aluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% protective earth path. Each housing has a continuous access slot over its entire length for the insertion of plug-in units. Housing configurations include 4-pole varieties, with optional isolated ground. The housing sections join together using bus connectors which fit into the channels of the adjoining section. An installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.



GLOBAL SYSTEM:

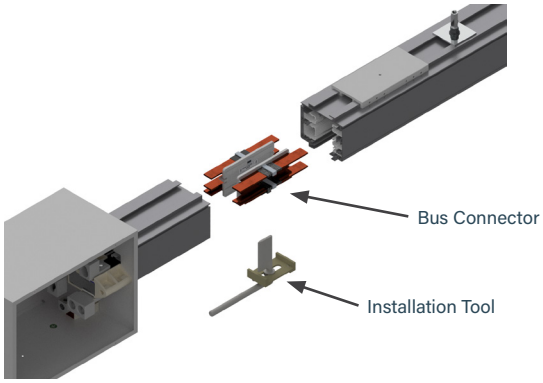


METRIC SYSTEM:



MATERIAL
Extruded Aluminum
RATINGS
100% Protective Earth 630 Amps 415 Volt
METRIC
Length 1.5 m, Max 3 m or custom lengths between .6 - 3 m **Weight** 3 m 4 pole w/ ground: 69 kg
GLOBAL
Length 1.5 m, Max 6 m or custom lengths between .6 - 6 m **Weight** 3 m 4 pole: 52.1 kg 3 m 4 pole w/ ground: 54.4 kg

METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow



630T5 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

G	S	630	T5	C	4	S	–	M100	C	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Straight Length	9. Busway Access		10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

G Global **M** Metric

2. Product Type *(section component)*

S Straight Section

3. Product Frame *(maximum amperage)*

630 630 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper **H** Hybrid (Cu/Al)

***Global (G) systems must choose Copper (C), Metric (M) systems must choose Hybrid (H)*

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral **G** 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Straight Length *(length of section)*

MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD Paint Factory Silver **RED** Paint Factory Red
BLK Paint Factory Black **BLU** Paint Factory Blue
WHT Paint Factory White ****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

11. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

MS630K5HGS-M225C-P013 = *Global System, Straight Section, 630 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 2 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape Marking*

MS630K5HGS-M225P-P013 = *Metric System, Straight Section, 630 amps, T5 Series K5 (Limiting Strip), Hybrid Conductor, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2.25 meter Straight Length, Painted RAL 1001, Factory Black Tape Marking*

630T5 SYSTEMS

ELBOW SECTIONS

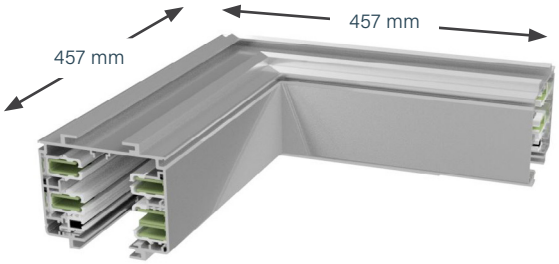
PRODUCT DESCRIPTION

An elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

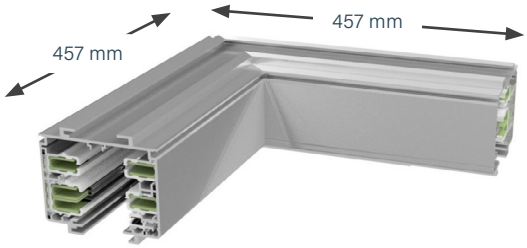
Connection Accessories
A joint kit (**page 4.85**) is used to make mechanical and electrical connections to adjacent busway sections *(ordered separately)*.

Metric System Weight 23.1 kg

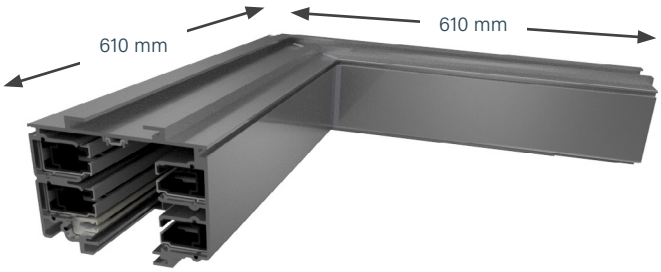
GLOBAL SYSTEM:



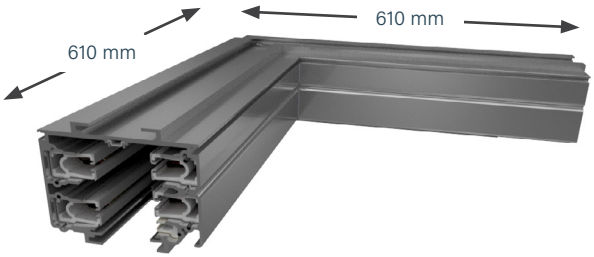
GLOBAL SYSTEM:



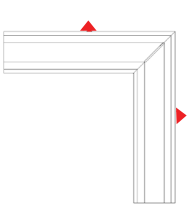
METRIC SYSTEM:



METRIC SYSTEM:

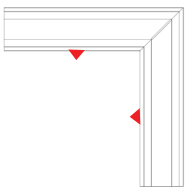


External Elbow



External Elbow

Internal Elbow



Internal Elbow

▲ = Polarizing Stripe

630T5 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

G	E	630	T5	C	4	S	–	IN	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

G Global **M** Metric

2. Product Type *(section component)*

E Elbow Section

3. Product Frame *(maximum amperage)*

630 630 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper **H** Hybrid (Cu/Al)

***Global (G) systems must choose Copper (C), Metric (M) systems must choose Hybrid (H)*

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral **G** 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN Internal **HN** Seismic Internal
EX External **GX** Seismic External

***HN and GX seismic options can only be selected with Global (G) systems*

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish **RED** Paint Factory Red
BLK Paint Factory Black **BLU** Paint Factory Blue
WHT Paint Factory White ****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking **7** Tape Factory Blue
3 Tape Factory Black **8** Tape Factory Green
4 Tape Factory White **9** Tape Factory Yellow
6 Tape Factory Red

EXAMPLES

GE630K5C4S-IN-STD7 = *Global System, Elbow Section, 630 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Silver, Factory Blue Tape Marking*

ME630T5HGS-EX-BLK0 = *Metric System, Elbow Section, 630 amps, T5 Series, Hybrid Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Black*

630T5 SYSTEMS

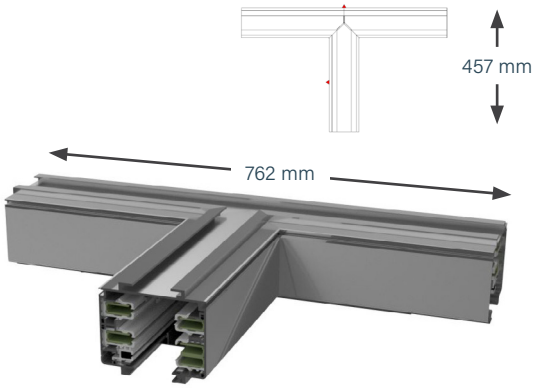
TEE SECTIONS

PRODUCT DESCRIPTION

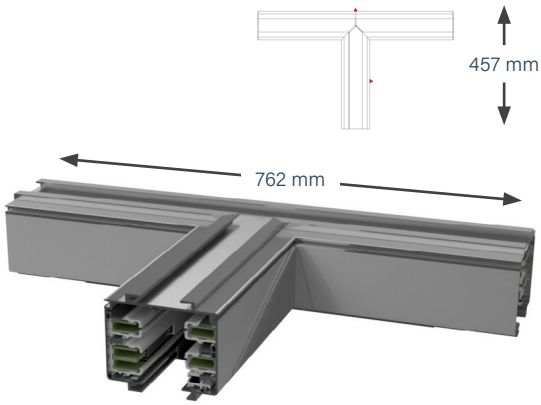
Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Global System Weight 21.8 kg

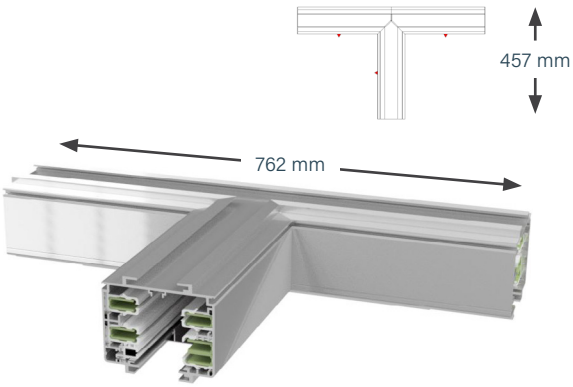
**The below dimensions apply to G630 (Global) systems only. Tees are not available for M630 (Metric) systems.*



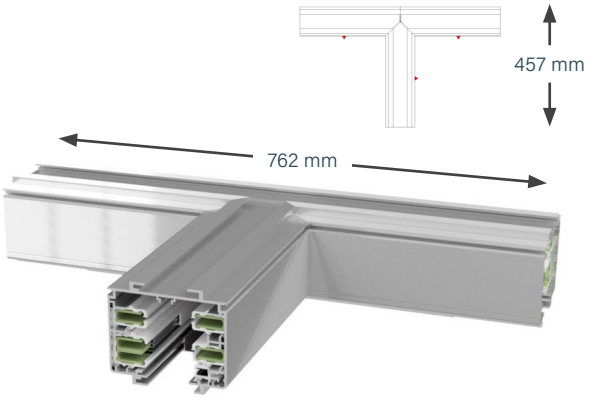
EXTERNAL-LEFT (EL)



EXTERNAL-RIGHT (ER)



INTERNAL-LEFT (IL)



INTERNAL-RIGHT (IR)

▲ = Polarizing Stripe

630T5 SYSTEMS

TEE SECTIONS: PRODUCT NUMBERS

G	T	630	T5	C	4	S	–	IR	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

G Global

2. Product Type *(section component)*

T Tee Section

3. Product Frame *(maximum amperage)*

630 630 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IL Internal-Left
IR Internal-Right
EL External-Left
ER External-Right
HL Seismic Internal-Left
HR Seismic Internal-Right
GL Seismic External-Left
GR Seismic External-Right

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

GT630T5C4S-IR-RED0 = *Global System, Tee Section, 630 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking*

GT630K5HGS-EL-STD0 = *Global System, Tee Section, 630 amps, T5 Series K5 (Limiting Strip), Hybrid Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Painted Factory Silver, No Tape Marking*

630T5 SYSTEMS

END FEED UNITS

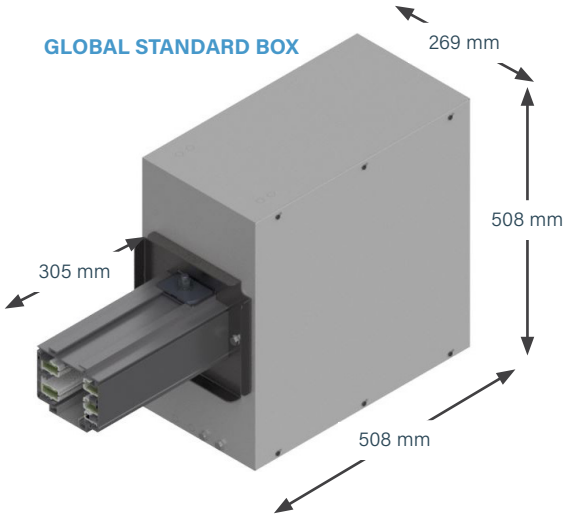
PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the busway. Factory assembled unit consists of a steel junction box, with removable side, connected to a 0.3 meter section of busway. The assembly includes protective earth lugs for wires up to 350MCM and connection lugs that can handle up to (2) 300 mm^2 wires *(CU)* or (2) 300 mm^2 wires *(AL)*. Reverse end feed units are for connection to the opposite end of the busway section *(polarizing strip faces to right as viewed from end of unit)*.

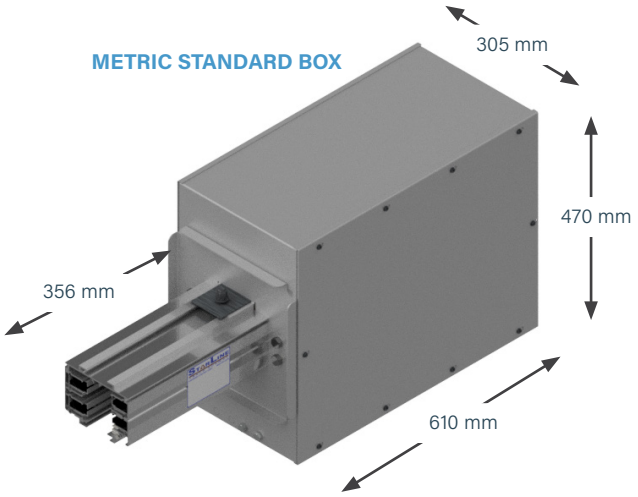
Junction box is sized such that one or two 101.6 millimeter conduits can be installed in the end of the box. End power feed units are connected to adjacent busway sections using a housing coupler and bus connector *(ordered separately)*. Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Global System Weight 16.3 kg
Metric System Weight 38.3 kg

GLOBAL STANDARD BOX



METRIC STANDARD BOX



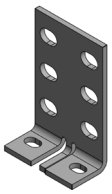
	GLOBAL BOXES		
LUGS	Standard	Large	Fused
Standard	**S**		
Double			
Bolt*	**B**		

	METRIC BOXES		
LUGS	Standard	Large	Fused
Standard	**S**		
Double	**D**		
Bolt*	**B**		

**Bolt options include bolt, washer, nut. Lug not included.*

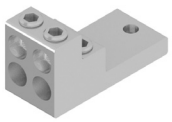
Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com

GLOBAL STANDARD "S"



GLOBAL BOLT "B"

METRIC STANDARD "S"



METRIC DOUBLE "D"

METRIC BOLT "B"

630T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

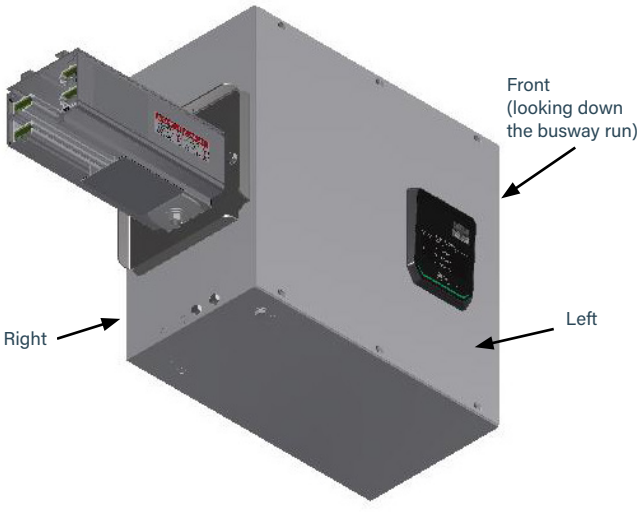
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

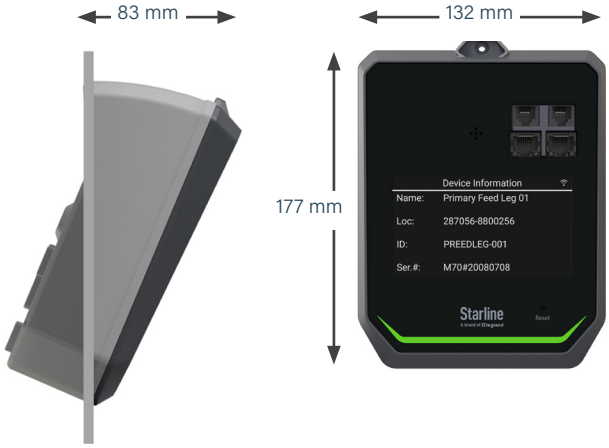
Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX





*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 4.47** *End Feed Units: Product Numbers).*

630T5 SYSTEMS

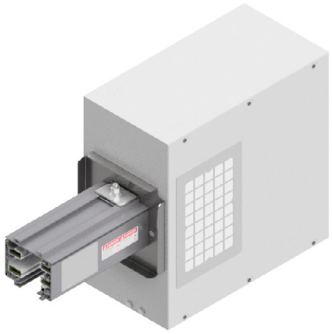
END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

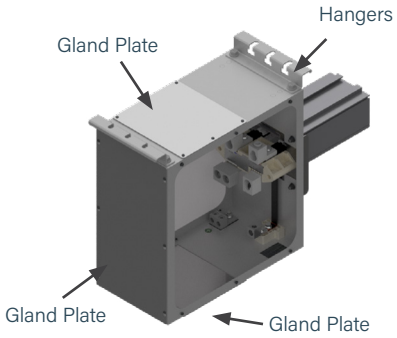
When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T5); IP54 (S5)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5"(127mm) x 7" (178mm)
End Feeds: 630A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 4.48** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 4.47** End Feed Units: Product Numbers)*

630T5 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

G	F	630	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

G Global
M Metric

2. Product Type *(section component)*

F End Feed

3. Product Frame *(maximum amperage)*

630 630 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper
H Hybrid (Cu/Al)
***Global (G) systems must choose Copper (C), Metric (M) systems must choose Hybrid (H)*

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard
R Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box
B Bolt lugs, Standard box
D Double lugs, Standard box
**Double (D) lugs are offered for Metric (M) systems only*

9. Meter Location *(from the terminal, side with removable lid)*

R Right
L Left
N None (N/A)

10. Accessories Package *(optional accessories for feed units)*

S Standard
C IR Window - Circular
F End Feed Hanger & Gland Plates
U Starline Rect. IR window, 8" (203mm) x 12" (305mm)
B (C+F)
P (U+F)

11. Accessories Location *(from the terminal, side with accessory)*

N None (N/A)
L Left
R Right
F Front (consult the factory)

12. Straight Length *(length of section)*

M030 .3 meters
M035 .35 meters
****Global (G) systems must choose .30 meters (M030), Metric (M) systems must choose .35 meters (M035)*

13. Busway Access

C Continuous

14. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*
***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

15. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLE

GF630T5C4R-SLSN-M030C-BLK0 = *Global System, End Feed, 630 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location, .3 meters Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking*

630T5 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

G	F	630	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M030	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*18. System Configuration and CT Type *(M70 AC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

M73
(2) RJ11, (2) RJ45, Lg. Display

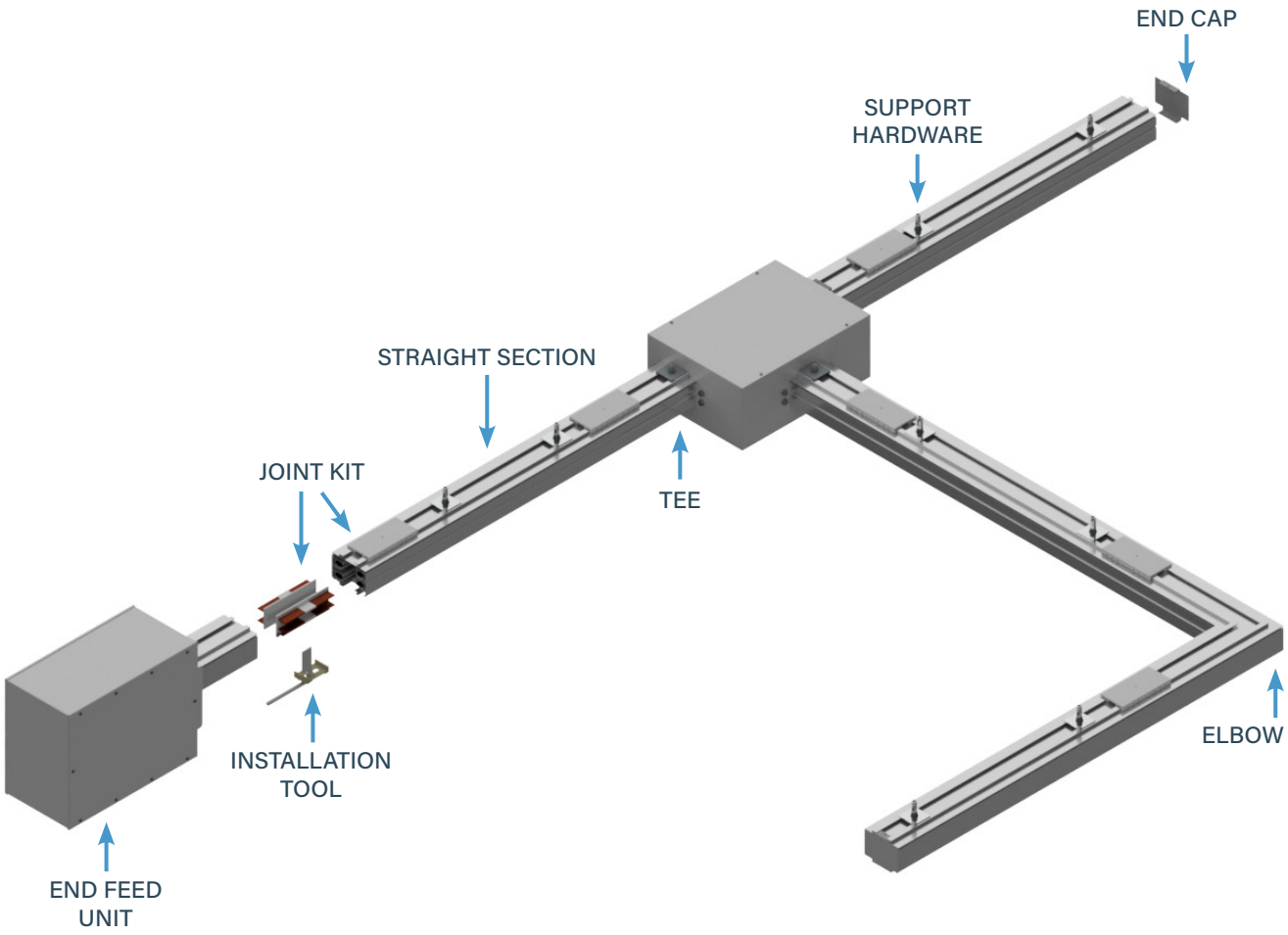
M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

GF630T5C4R-SLSN-M030C-BLK0-M73001 = *Global System, End Feed, 630 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

800T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

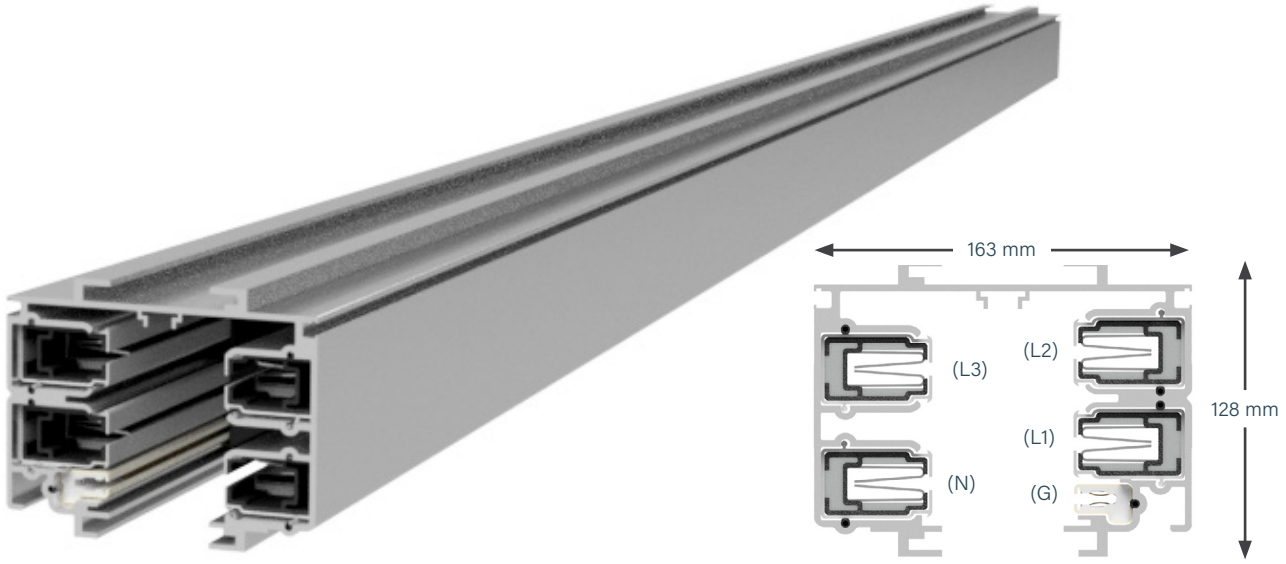
For further information on applicable T5 plug-in unit options, please consult the factory.

800T5 SYSTEMS

STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight sections consist of an extruded aluminum shell with you choice of copper or copper-aluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as a 100% protective earth. Each housing has a continuous access slot over its entire length for the insertion of plug-in units. Housing configurations include 4-pole varieties, with optional isolated ground. The housing sections join together using Bus connectors which fit into the channels of the adjoining section. An Installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.



MATERIAL
Extruded Aluminum
RATINGS
100% Protective Earth 800 Amps 415 Volt
LENGTH
1.5 m, Max 3 m or custom lengths between .6 - 3 m
WEIGHT
3 m 4 pole w/ ground: 69 kg- Hybrid 3 m 4 pole w/ ground: 98 kg- Copper

METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow

800T5 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

M	S	800	T5	C	4	S	– M100	C	– STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Straight Length	9. Busway Access	10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

S Straight Section

3. Product Frame *(maximum amperage)*

800 800 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper
H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Straight Length *(length of section)*

MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

11. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

MS800T5C4S-M100C-STD0 = *Metric System, Straight Section, 800 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Standard Polarization, 1 meter Straight Length, Factory Mill Finish, No Tape Marking*

MS800K5CGS-M225C-P013 = *Metric System, Straight Section, 800 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2.25 meter Straight Length, Painted RAL 1001, Factory Black Tape Marking*

800T5 SYSTEMS

ELBOW SECTIONS

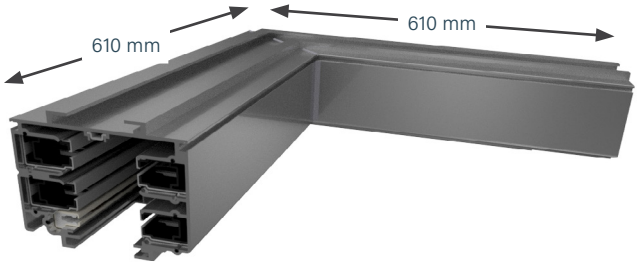
PRODUCT DESCRIPTION

An elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

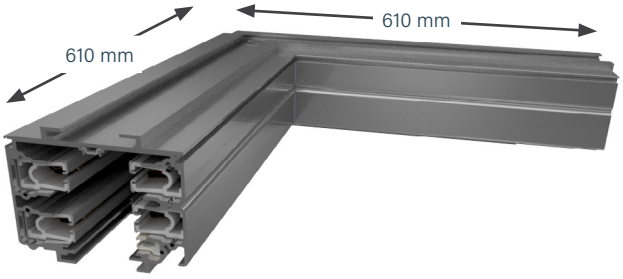
Connection Accessories

A joint kit (**page 4.85**) is used to make mechanical and electrical connections to adjacent busway sections *(ordered separately)*.

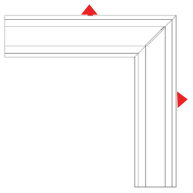
Weight 23.1 kg- Hybrid



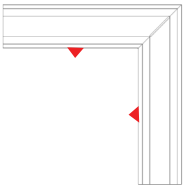
EXTERNAL ELBOW



INTERNAL ELBOW



External Elbow



Internal Elbow

▲ = Polarizing Stripe

800T5 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

M	E	800	T5	C	4	S	–	IN	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

E Elbow Section

3. Product Frame *(maximum amperage)*

800 800 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper
H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN Internal
EX External

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

ME800K5C4S-IN-STD7 = *Metric System, Elbow Section, 800 amps, T5 Series K5 (Limiting Strip), Copper Conductor, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Factory Mill Finish, Factory Blue Tape Marking*

ME800T5CGS-EX-BLK0 = *Metric System, Elbow Section, 800 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Black, No Tape Marking*

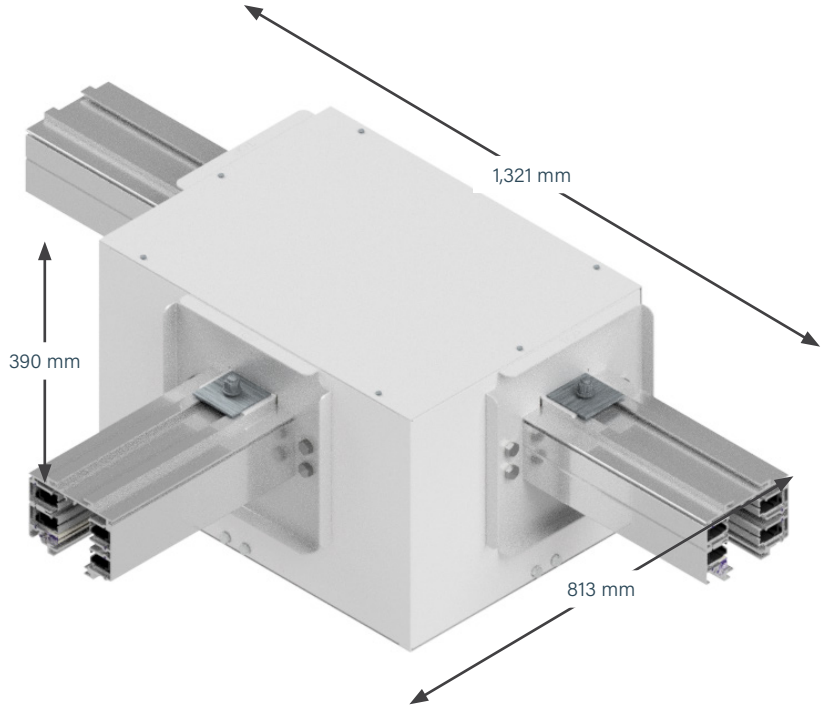
800T5 SYSTEMS

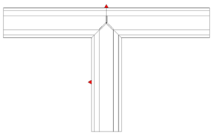
TEE SECTIONS

PRODUCT DESCRIPTION

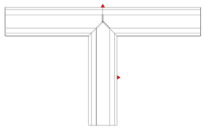
Tee sections are used for creating a 90 degree branch leg in a busway run. When laying out a system, specify the correct busbar orientation of the tee. Indicate right or left, external or internal busbars. External tees are preferred. Tee sections are connected to adjacent busway sections using an installation tool and joint kit that includes a housing coupler and bus connector *(ordered separately)*. This handles both the mechanical and electrical connection between a straight section and tee section of busway.

Weight 81.6 kg



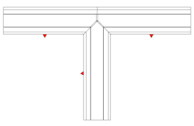


External-Left (EL)

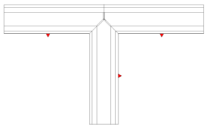


External-Right (ER)

▲ = Polarizing Stripe



Internal-Left (IL)



Internal-Right (IR)

800T5 SYSTEMS

TEE SECTIONS: PRODUCT NUMBERS

M	T	800	T5	C	4	S	–	IR	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

T Tee Section

3. Product Frame *(maximum amperage)*

800 800 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper
H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IL Internal-Left
IR Internal-Right
EL External-Left
ER External-Right

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLES

MT800T5H4S-IR-RED0 = *Metric System, Tee Section, 800 amps, T5 Series, Hybrid Conductor, 3 Phase plus Neutral, Standard Polarization, Internal-Right Turning Direction, Painted Factory Red, No Tape Marking*

MT800K5HGS-EL-STD0 = *Metric System, Tee Section, 800 amps, T5 Series K5 (Limiting Strip), Hybrid Conductor, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External-Left Turning Direction, Painted Factory Silver, No Tape Marking*

800T5 SYSTEMS

END FEED UNITS

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the Busway. Factory assembled unit consists of a 470 x 610 x 305 millimeter steel junction box, with removable side, connected to an 0.3 meter section of busway. The assembly includes ground lugs for wires up to 185mm2 and connection lugs that can handle up to (2) 300mm2 wires (CU) or (2) 300 mm2 wires (AL). Reverse end feed units are for connection to the opposite end of the busway section *(polarizing strip faces to right as viewed from end of unit).*

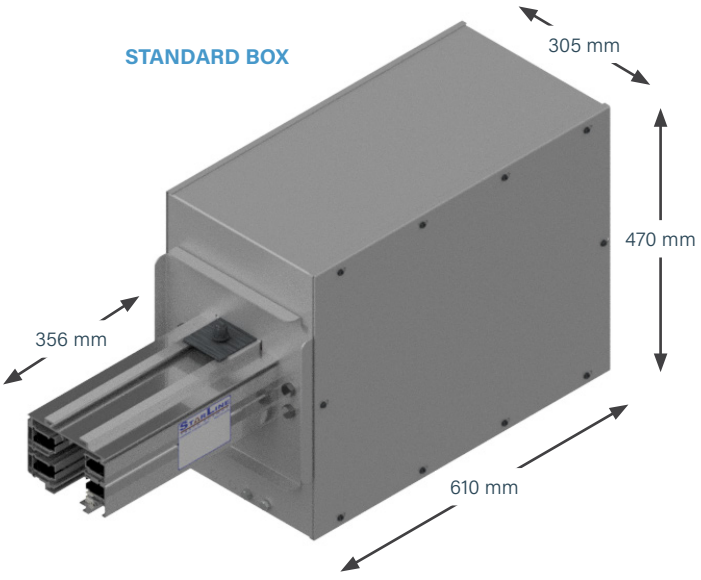
Junction box is sized such that one or two 101.6 millimeter conduits can be installed in the end of the box.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector *(ordered separately)*.

Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight 38.3 kg

STANDARD BOX

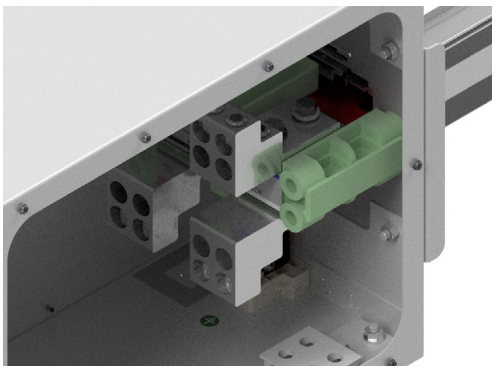


	BOXES		
LUGS	Standard	Large	Fused
Standard	S		
Double	D		
Bolt*	B		
Quad*	Q		

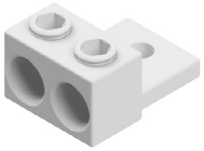
Box size and Lug options: Refer to option 8. Lug/Box Options on **page 4.59**
End Feed Units: Product Numbers

**Bolt options include bolt, washer, nut. Lug not included.*

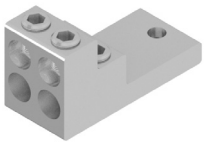
Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com



DOUBLE LUGS



METRIC STANDARD "S"



METRIC DOUBLE "D"

METRIC QUAD "Q"

METRIC BOLT "B"

800T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

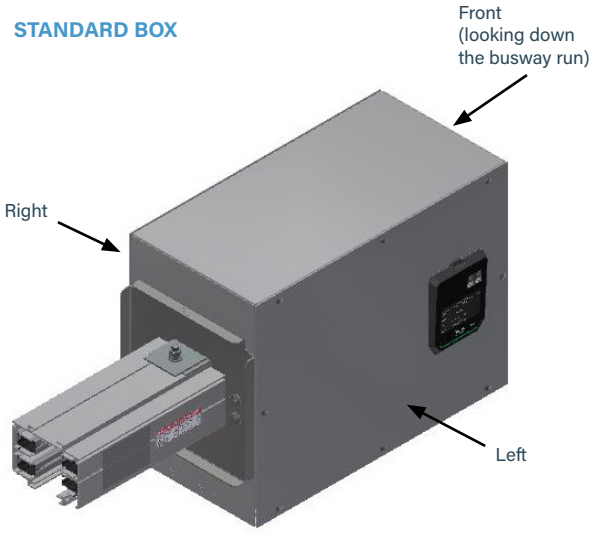
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

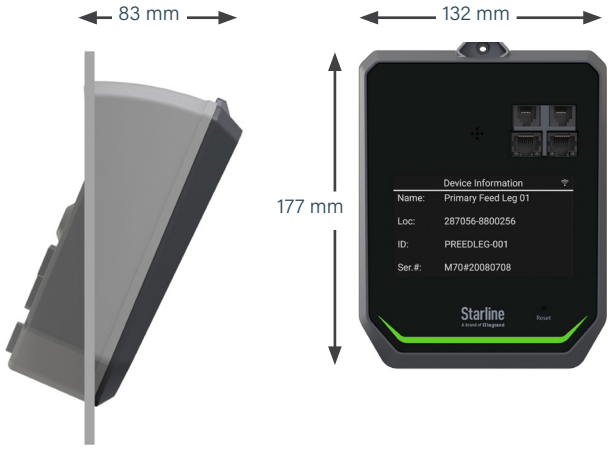
Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX





*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 4.59** *End Feed Units: Product Numbers).*

800T5 SYSTEMS

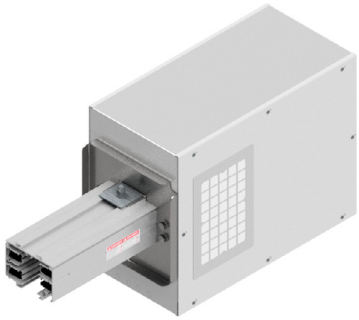
END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

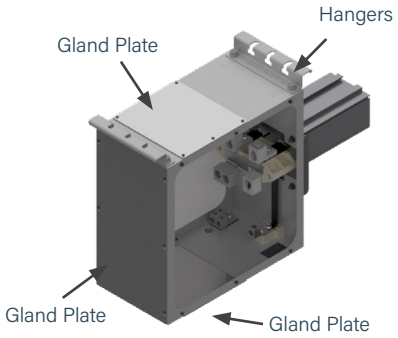
When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T5); IP54 (S5)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5" (127mm) x 7" (178mm)
End Feeds: 630A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 4.60** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 4.59** End Feed Units: Product Numbers)*

800T5 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

M	F	800	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M035	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

F End Feed

3. Product Frame *(maximum amperage)*

800 800 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

C Copper
H Hybrid (Cu/Al)Strip)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard
R Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box
B Bolt Lugs, Standard Box
D Double lugs, Standard box
Q Quad lugs, Large box

9. Meter Location *(from the terminal, side with removable lid)*

R Right
N None (N/A)
L Left

10. Accessories Package *(optional accessories for feed units)*

S Standard
C IR Window - Circular
F End Feed Hanger & Gland Plates
U Starline Rect. IR window, 8" (203mm) x 12" (305mm)
B (C+F)
P (U+F)

11. Accessories Location *(from the terminal, side with accessory)*

N None (N/A)
L Left
R Right
F Front (consult the factory)

12. Straight Length *(length of section)*

M035 .35 meters

13. Busway Access

C Continuous

14. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

***Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems*

15. Tape Marking *(colored tape on both sides of busway housing)*

0 No Tape Marking
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

EXAMPLE

MF800T5C4R-SLSN-M035P-BLK0 = *Metric System, End Feed, 800 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location, .35 meter Straight Length, Access Panels, Painted Factory Black, No Tape Marking*

800T5 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

M	F	800	T5	C	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M035	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

1 Δ, Solid CTs, Millivolt, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
5 Y, Solid CTs, Millivolt, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
9 Δ, Solid CTs, Millivolt, Measured Neutral
C Δ, Split CTs, 5A-secondary, Measured Neutral

*18. System Configuration and CT Type *(M70 DC)*

J DC Circuit 1, Solid CT
K DC Circuit 2, Solid CT
L DC Both Circuits, Solid CT

M73
(2) RJ11, (2) RJ45, Lg. Display

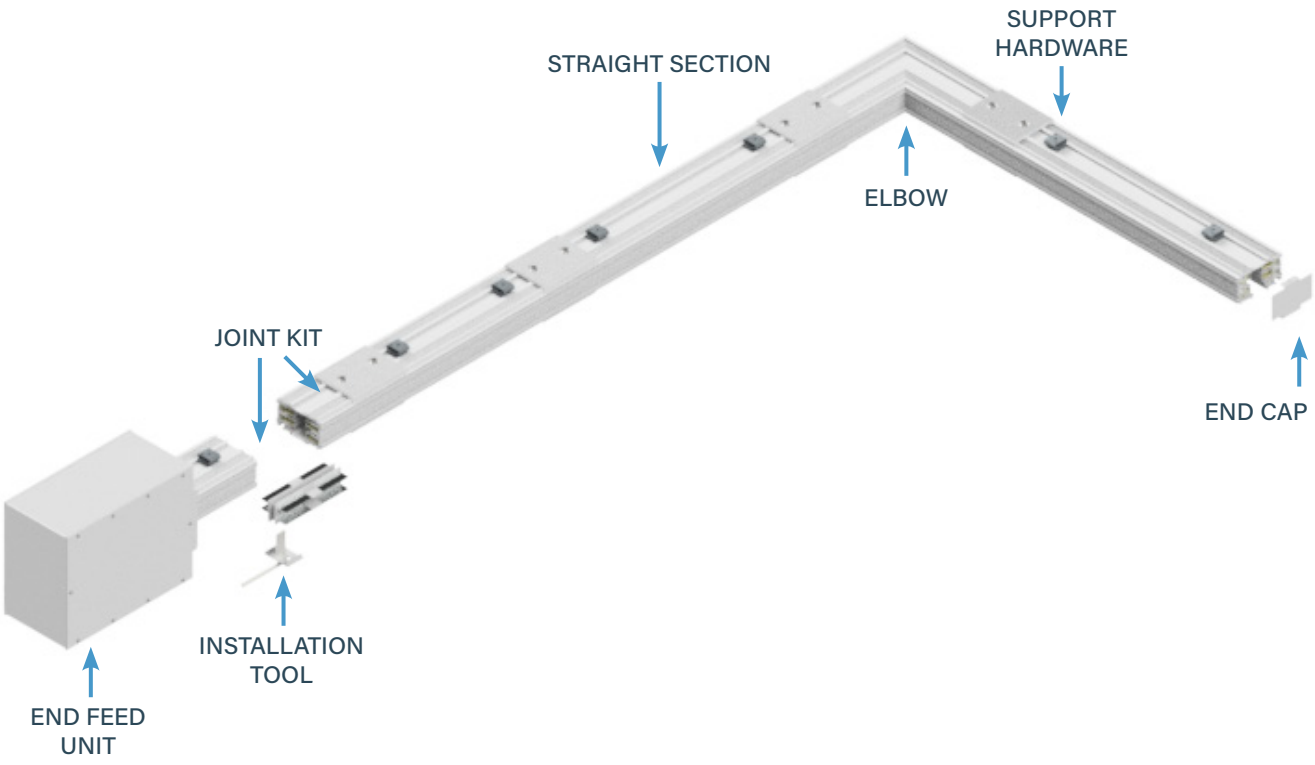
M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

MF800T5C4R-SLSN-M035P-BLK0-M73001 = *Metric System, End Feed, 800 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Left Meter Location, Standard Accessory Package, No Accessory Location, .35 meter Straight Length, Access Panels, Painted Factory Black, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

1000T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

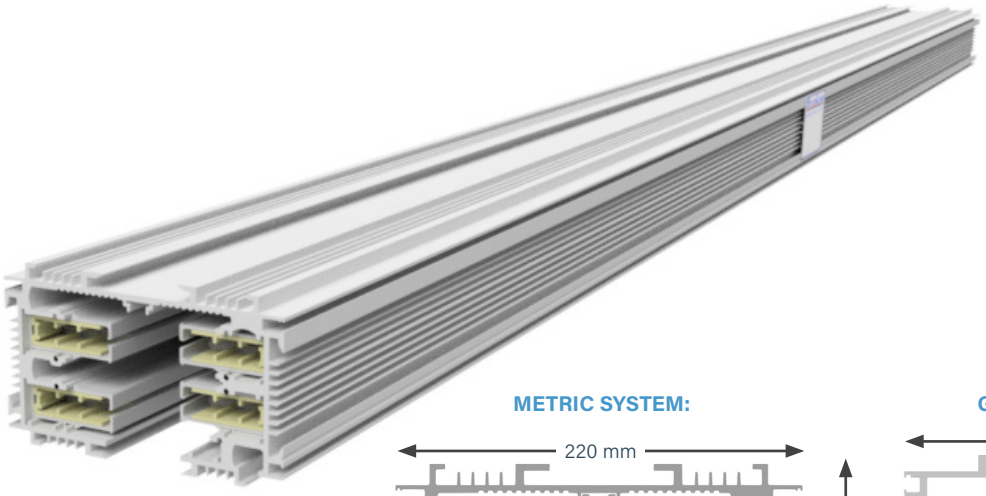
For further information on applicable T5 plug-in unit options, please consult the factory.

1000T5 SYSTEMS

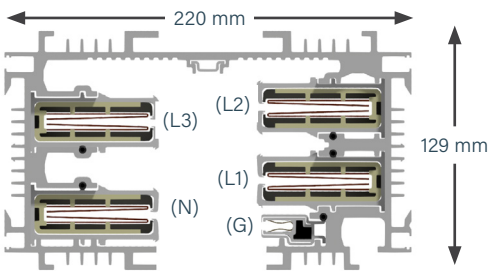
STRAIGHT SECTIONS

PRODUCT DESCRIPTION

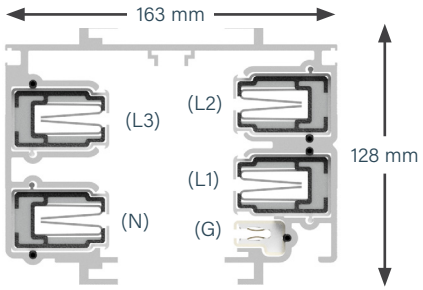
Track Busway straight sections consist of an extruded aluminum shell with you copper-aluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as protective earth. Each housing has a continuous access slot over its entire length for the insertion of plug-in units. Housing configurations include 4-pole varieties, with optional isolated earth. The housing sections join together using bus connectors which fit into the channels of the adjoining section. An installation tool is used to force the blades into the busbar channels for a solid "spring-pressure" electrical connection.



METRIC SYSTEM:



GLOBAL SYSTEM:



MATERIAL
Extruded Aluminum
RATINGS
100% Protective Earth 1000 Amps 415 Volt
LENGTH
1.5 m, Max 3 m or custom lengths between .6 - 3 m
WEIGHT
Metric 3 m 4 pole w/ ground: 95 kg (Hybrid) **Global** 3 m 4 pole w/ Iso ground: 69 kg (Hybrid)

GLOBAL/METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow

1000T5 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

M	S	1K0	T5	H	4	S	– M100	C	– STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization	8. Straight Length	9. Busway Access	10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

M Metric **G** Global

2. Product Type *(section component)*

S Straight Section

3. Product Frame *(maximum amperage)*

1K0 1000 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral **G** 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Straight Length *(length of section)*

MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish **RED** Paint Factory Red
BLK Paint Factory Black **BLU** Paint Factory Blue
WHT Paint Factory White ****RAL** *(please see page 4.81)*
***Standard offering (STD) will be Factory Silver Paint for Global (G) systems*

11. Tape Marking *(colored tape on both sides of busway housing)*

0 None

EXAMPLES

MS1K0T5H4S-M100C-STD0 = *Metric System, Straight Section, 1000 amps, T5 Series, Hybrid, 3 Phase plus Neutral, Standard Polarization, 1 meter Straight Length, Continuous Busway Access, Factory Mill Finish, No Tape Marking*

GS1K0K5HGS-M200C-P010 = *Global System, Straight Section, 1000 amps, T5 Series K5 (Limiting Strip), Hybrid, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2 meter Straight Length, Continuous Busway Access, Painted RAL 1001, No Tape Marking*

1000T5 SYSTEMS

ELBOW SECTIONS

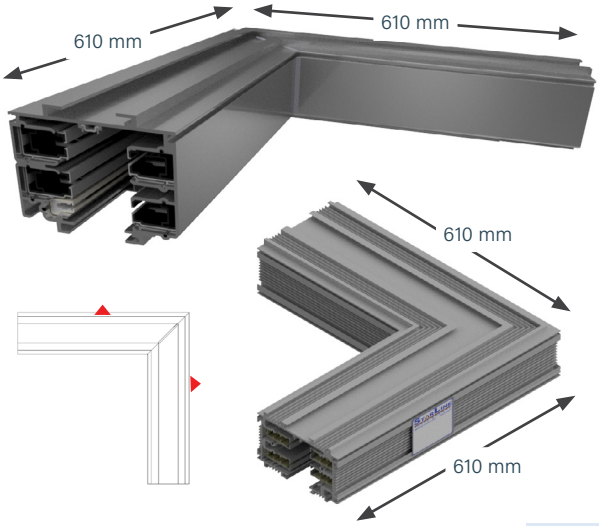
PRODUCT DESCRIPTION

An elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

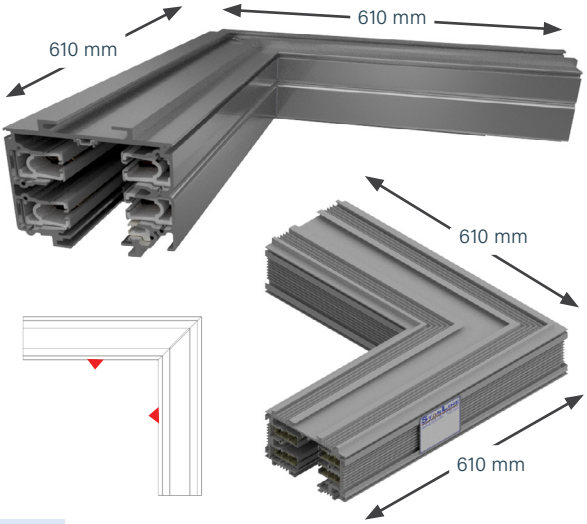
Connection Accessories
A joint kit is used to make mechanical and electrical connections to adjacent busway sections *(ordered separately)*.

Metric Weight 35 kg
Global Weight 23.1 kg

EXTERNAL ELBOW

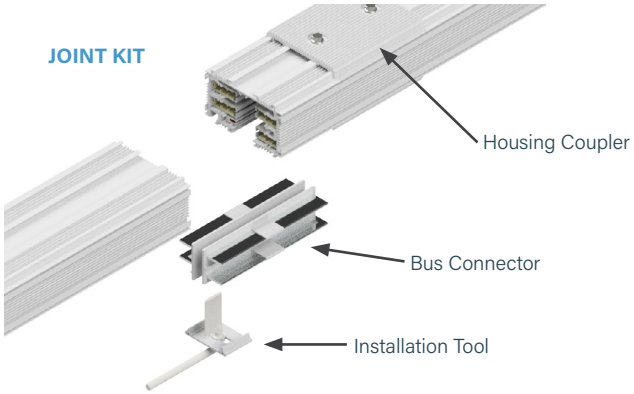


INTERNAL ELBOW



▲ = Polarizing Stripe

JOINT KIT



1000T5 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

M	E	1K0	T5	H	4	S	–	IN	–	STD	0
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction		9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric **G** Global

2. Product Type *(section component)*

E Elbow Section

3. Product Frame *(maximum amperage)*

1K0 1000 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series **K5** T5 Series (Limiting Strip)

5. Material *(busbar material)*

H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN Internal **EX** External

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 None
3 Tape Factory Black
4 Tape Factory White
6 Tape Factory Red
7 Tape Factory Blue
8 Tape Factory Green
9 Tape Factory Yellow

***Colored tape options available in Global (G) only*

EXAMPLES

ME1K0K5H4S-IN-BLU0 = *Metric System, Elbow Section, 1000 amps, T5 Series K5 (Limiting Strip), Hybrid, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Blue, No Tape Marking*

GE1K0T5HGS-EX-STD0 = *Global System, Elbow Section, 1000 amps, T5 Series, Hybrid, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Factory Mill Finish, No Tape Marking*

1000T5 SYSTEMS

END FEED UNITS

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the Busway. Factory assembled unit consists of a 470 x 610 x 305 millimeter steel junction box, with removable side, connected to an 0.3 meter section of busway. The assembly includes ground lugs for wires up to 185mm2 and connection lugs that can handle up to (2) 300mm2 wires (CU) or (2) 300 mm2 wires (AL). Reverse end feed units are for connection to the opposite end of the busway section *(polarizing strip faces to right as viewed from end of unit).*

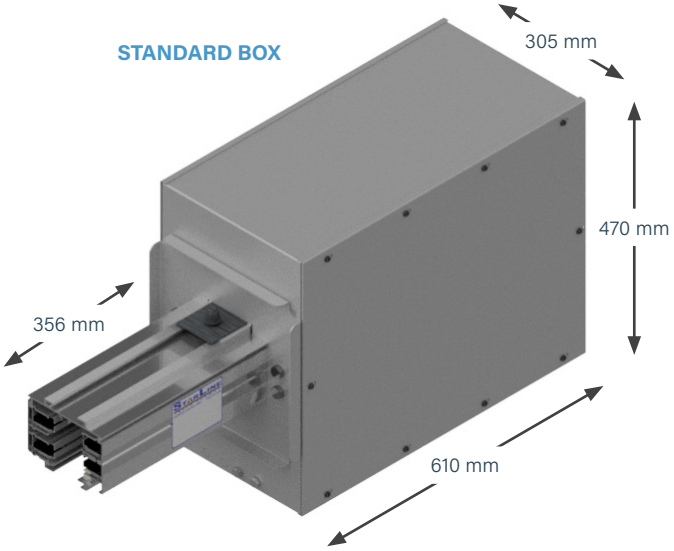
Junction box is sized such that three 101.6 millimeter conduits can be installed in the end of the box.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector *(ordered separately)*.

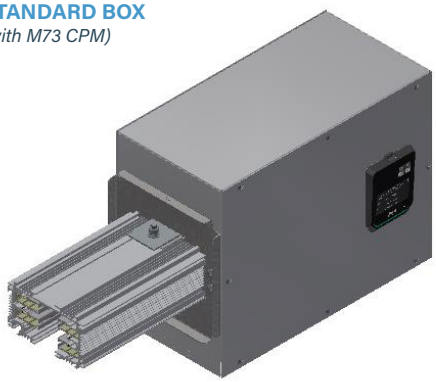
Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Metric Weight 45.6 kg (34.5 kg without busway stub)
Global Weight 38.3 kg

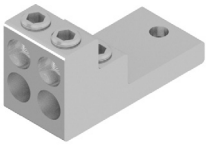
STANDARD BOX



STANDARD BOX
(with M73 CPM)



	BOXES		
LUGS	Standard	Large	Fused
Standard	**S**		
Double			
Bolt*	**B**		



STANDARD "S"

STANDARD "B"

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 4.69**
End Feed Units: Product Numbers

**Bolt options include bolt, washer, nut. Lug not included.*

Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com

1000T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

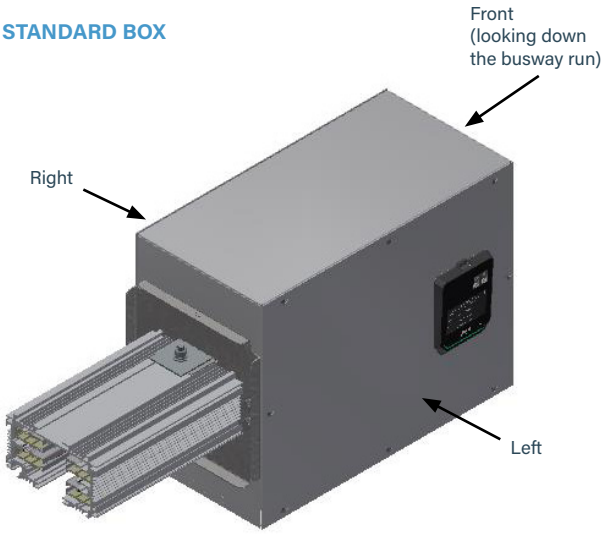
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

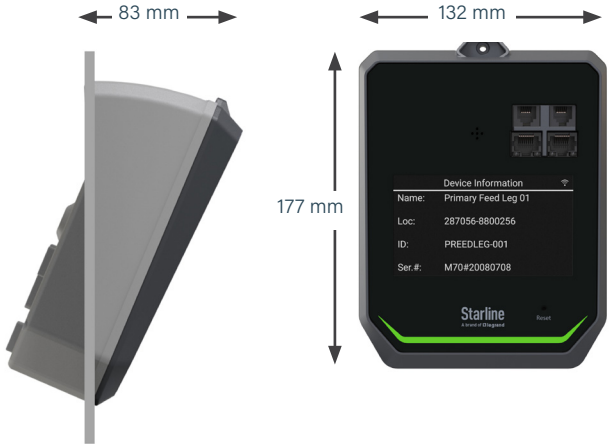
Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX





*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 4.69** *End Feed Units: Product Numbers).*

1000T5 SYSTEMS

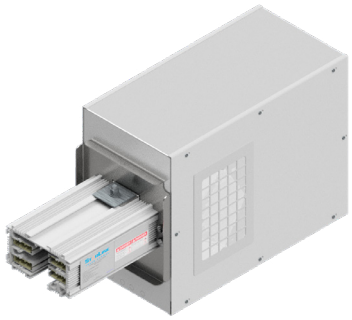
END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

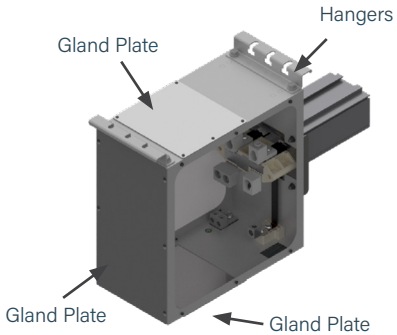
When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T5); IP54 (S5)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5″ (127mm) x 7″ (178mm)
End Feeds: 630A and Above	8″ (203mm) x 12″ (305mm)

*(Refer to option 17. M70 Options on **page 4.70** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 4.69** End Feed Units: Product Numbers)*

1000T5 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

M	F	1K0	T5	H	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M035	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

M	Metric	**G**	Global

2. Product Type *(section component)*

F	End Feed

3. Product Frame *(maximum amperage)*

1K0	1000 amps

4. Compatibility *(frame compatibility)*

T5	T5 Series	**K5**	T5 Series (Limiting Strip)

5. Material *(busbar material)*

H	Hybrid (Cu/Al)Strip)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4	3 Phase plus Neutral	**G**	3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S	Standard	**R**	Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S	Standard lugs, Standard box	**B**	Bolt lugs, Standard box

9. Meter Location *(from the terminal, side with removable lid)*

R	Right	**L**	Left
N	None (N/A)		

10. Accessories Package *(optional accessories for feed units)*

S	Standard
C	IR Window - Circular
F	End Feed Hanger & Gland Plates
U	Starline Rect. IR window, 8" (203mm) x 12" (305mm)
B	(C+F)
P	(U+F)

11. Accessories Location *(from the terminal, side with accessory)*

N	None (N/A)	**R**	Right
L	Left	**F**	Front (consult the factory)

12. Straight Length *(length of section)*

M035	.35 meters

13. Busway Access

C	Continuous

14. Paint Color *(allows painting of the busway housing)*

STD	Factory Mill Finish	**RED**	Paint Factory Red
BLK	Paint Factory Black	**BLU**	Paint Factory Blue
WHT	Paint Factory White	****RAL**	*(please see page 4.81)*

15. Tape Marking *(colored tape on both sides of busway housing)*

0	None	**7**	Tape Factory Blue
3	Tape Factory Black	**8**	Tape Factory Green
4	Tape Factory White	**9**	Tape Factory Yellow
6	Tape Factory Red		

EXAMPLE

MF1K0T5H4R-SRUL-M035C-BLK0 = *Metric System, End Feed, 1000 amps, T5 Series, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .35 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking*

1000T5 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

M	F	1K0	T5	H	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M035	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

2 Δ, Solid CTs, 5A-secondary, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
6 Y, Solid CTs, 5A-secondary, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
A Y, Solid CTs, 5A-secondary, Measured Neutral
C Y, Split CTs, 5A-secondary, Measured Neutral

M73
(2) RJ11, (2) RJ45, Lg. Display

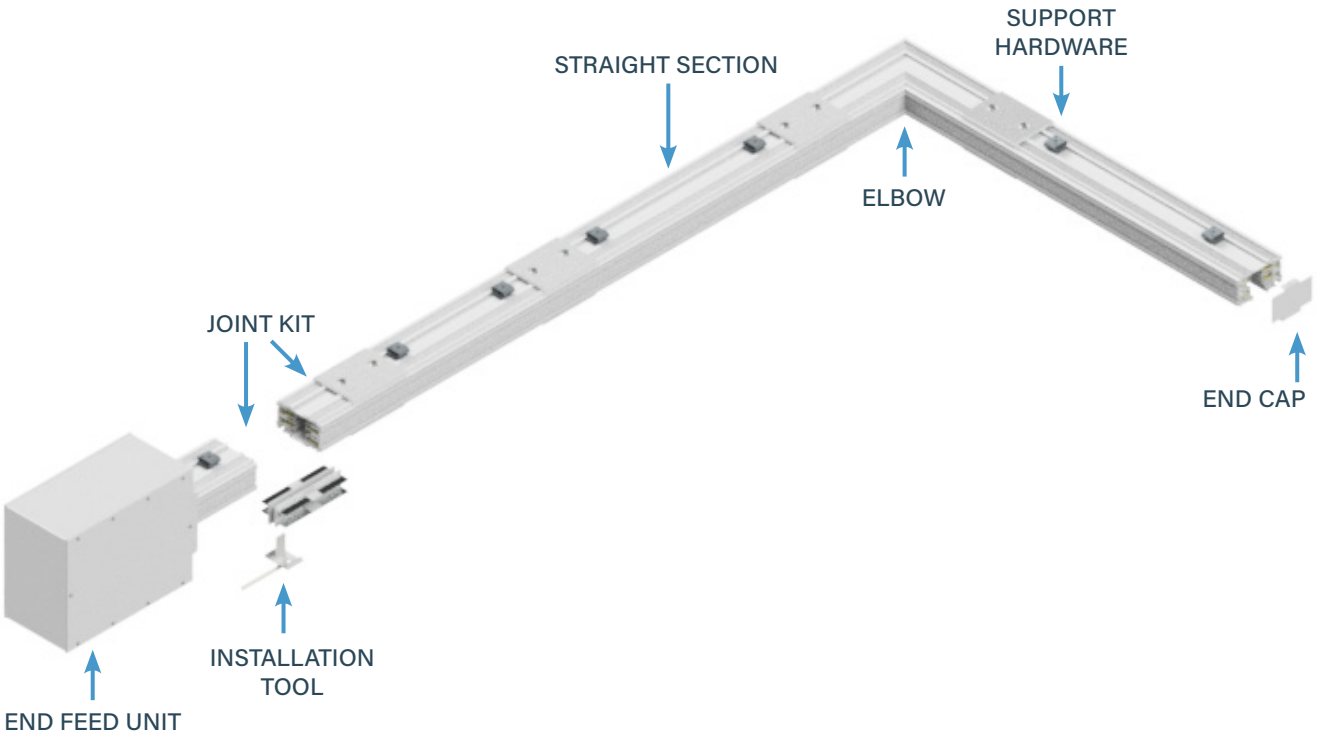
M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

MF1K0T5H4R-SRUL-M035C-BLK0-M73001 = *Metric System, End Feed, 1000 amps, T5 Series, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .35 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

1250T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

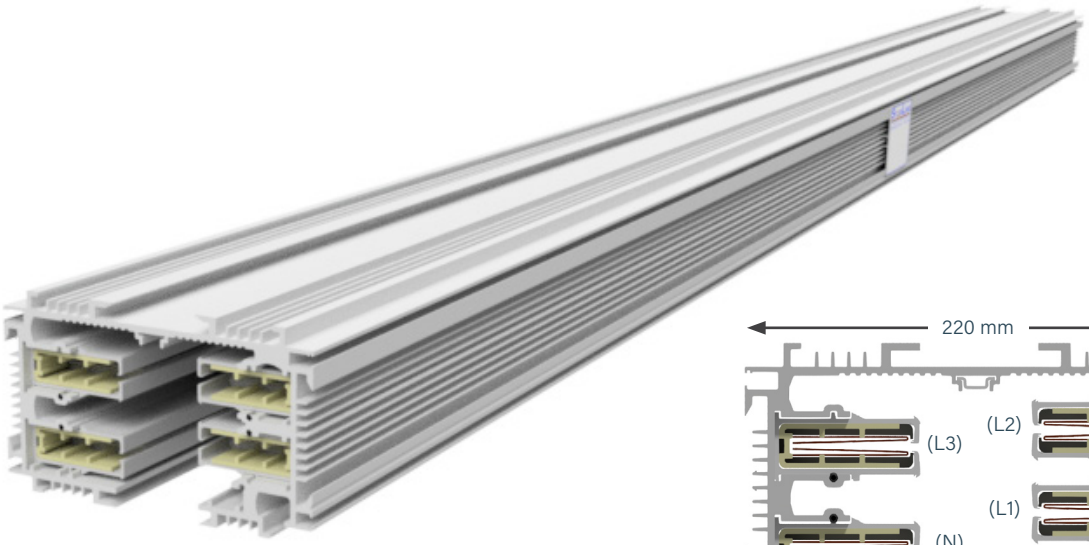
For further information on applicable T5 plug-in unit options, please consult the factory.

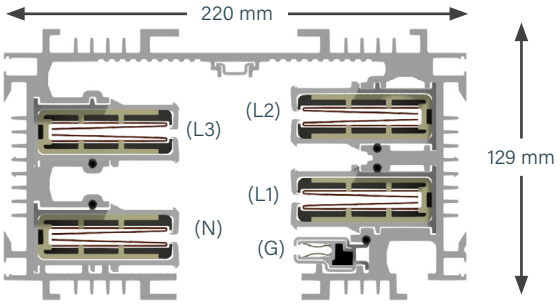
1250T5 SYSTEMS

STRAIGHT SECTIONS

PRODUCT DESCRIPTION

Track Busway straight sections consist of an extruded aluminum shell with you copper-aluminum channel busbars contained in a full length insulator mounted on the interior walls. The aluminum extrusion acts as protective earth. Each housing has a continuous access slot over its entire length for the insertion of plug-in units. Housing configurations include 4-pole varieties, with optional isolated ground. The housing sections join together using bus connectors which fit into the channels of the adjoining section. An installation tool is used to force the blades into the busbar channels for a solid “spring-pressure” electrical connection.





MATERIAL
Powder Coated Extruded Aluminum
RATINGS
100% Protective Earth 1250 Amps 415 Volt
LENGTH
1.5 m, Max 3 m or custom lengths between .6 - 3 m
WEIGHT
3 m 4 pole w/ ground: 95 kg (Hybrid)

GLOBAL/METRIC	
L1 or Phase A	brown
L2 or Phase B	black gray
L3 or Phase C	blue
Neutral Ground	green/yellow

1250T5 SYSTEMS

STRAIGHT SECTIONS: PRODUCT NUMBERS

M	S	1K2	T5	H	4	S	–	M100	C
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Straight Length	9. Busway Access

–	STD	0
	10. Paint Color	11. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

S Straight Section

3. Product Frame *(maximum amperage)*

1K2 1250 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series

K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Straight Length *(length of section)*

MXYY X = meters, YY = centimeters

9. Busway Access *(how plugs access the busway)*

C Continuous

10. Paint Color *(allows painting of the busway housing)*

STD Paint Factory Silver
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

11. Tape Marking *(colored tape on both sides of busway housing)*

0 None

EXAMPLES

MS1K2T5H4S-M100C-STD0 = *Metric System, Straight Section, 1250 amps, T5 Series, Hybrid, 3 Phase plus Neutral, Standard Polarization, 1 meter Straight Length, Continuous Busway Access, Painted Factory Silver, No Tape Marking*

MS1K2K5HGS-M200C-P010 = *Metric System, Straight Section, 1250 amps, T5 Series K5 (Limiting Strip), Hybrid, 3 Phase plus Neutral plus Internal Ground Connector, Standard Polarization, 2 meter Straight Length, Continuous Busway Access, Painted RAL 1001, No Tape Marking*

1250T5 SYSTEMS

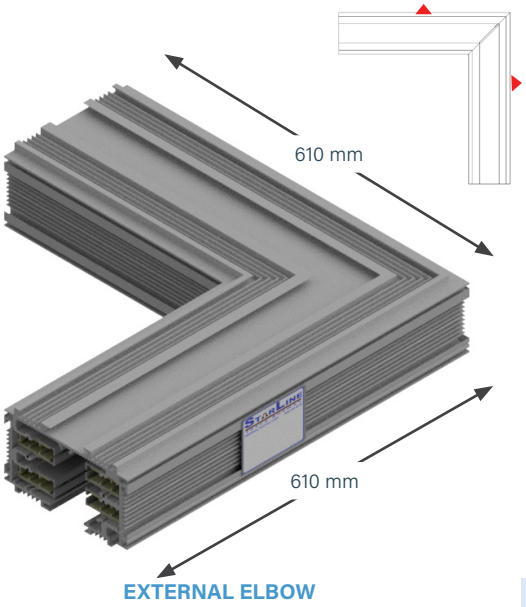
ELBOW SECTIONS

PRODUCT DESCRIPTION

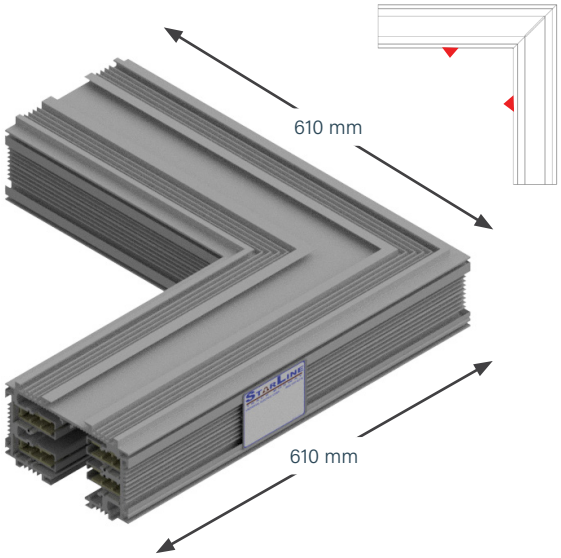
An elbow is used for making a horizontal 90 degree change of direction in a busway run. Specify external or internal elbow, according to the orientation of the polarizing strip in the busway sections to be connected.

Connection Accessories
A joint kit is used to make mechanical and electrical connections to adjacent busway sections *(ordered separately)*.

Weight 35 kg



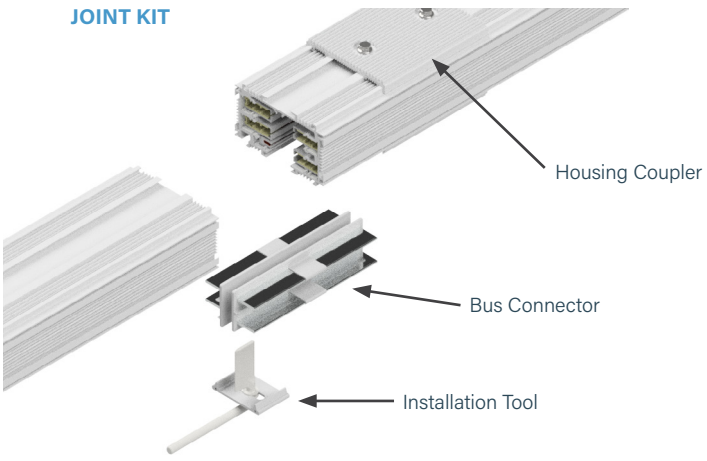
EXTERNAL ELBOW



INTERNAL ELBOW

▲ = Polarizing Stripe

JOINT KIT



1250T5 SYSTEMS

ELBOW SECTIONS: PRODUCT NUMBERS

M	E	1K2	T5	H	4	S	–	IN
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Turning Direction

–	STD	0
	9. Paint Color	10. Tape Marking

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

E Elbow Section

3. Product Frame *(maximum amperage)*

1K2 1250 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series

K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral

G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard

8. Turning Direction *(direction of section polarizing stripe)*

IN Internal

EX External

9. Paint Color *(allows painting of the busway housing)*

STD Factory Mill Finish
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

10. Tape Marking *(colored tape on both sides of busway housing)*

0 None

EXAMPLES

ME1K2K5H4S-IN-BLU0 = *Metric System, Elbow Section, 1250 amps, T5 Series K5 (Limiting Strip), Hybrid, 3 Phase plus Neutral, Standard Polarization, Internal Turning Direction, Painted Factory Blue, No Tape Marking*

ME1K2T5HGS-EX-STD0 = *Metric System, Elbow Section, 1250 amps, T5 Series, Hybrid, 3 Phase plus Neutral plus Internal Ground Conductor, Standard Polarization, External Turning Direction, Painted Factory Silver, No Tape Marking*

1250T5 SYSTEMS

END FEED UNITS

PRODUCT DESCRIPTION

Standard end power feed units connect to the end of the Busway. Factory assembled unit consists of a 470 x 610 x 305 millimeter steel junction box, with removable side, connected to an 0.3 meter section of busway. The assembly includes ground lugs for wires up to 185mm2 and connection lugs that can handle up to (2) 300mm2 wires (CU) or (2) 300 mm2 wires (AL). Reverse end feed units are for connection to the opposite end of the busway section *(polarizing strip faces to right as viewed from end of unit).*

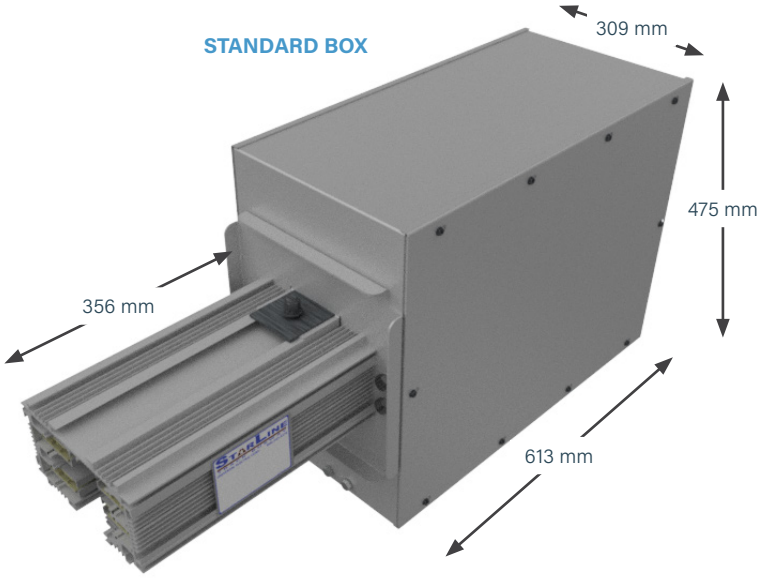
Junction box is sized such that three 101.6 millimeter conduits can be installed in the end of the box.

End power feed units are connected to adjacent busway sections using a housing coupler and bus connector *(ordered separately).*

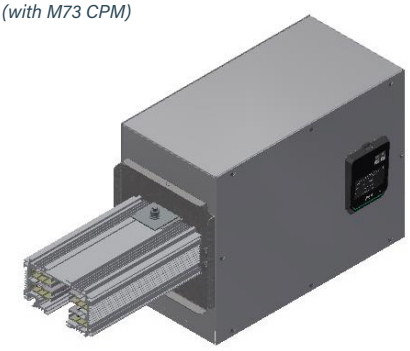
Special need power feed units for confined spaces, as found in mission critical data centers, can also be designed and fabricated but may require minimum quantities.

Weight 45.6 kg (34.5 kg without busway stub)

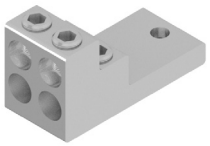
STANDARD BOX



STANDARD BOX
(with M73 CPM)



	BOXES		
LUGS	Standard	Large	Fused
Standard	**S**		
Double			
Bolt	**B**		



STANDARD "S"

STANDARD "B"

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 4.79**
End Feed Units: Product Numbers.

**Bolt options include bolt, washer, nut. Lug not included.*

Isolated or dedicated ground is determined at the feed during installation. For further details about Dedicated Ground vs. Isolated Ground, please reference our tech brief on* **downloads.starlinepower.com

1250T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End feed units can be populated with Starline's Critical Power Monitor to provide access to revenue-grade, three-phase power data. The M70 CPM is built with a 109 mm LCD touchscreen display that can be angled down for easier viewing from the floor.

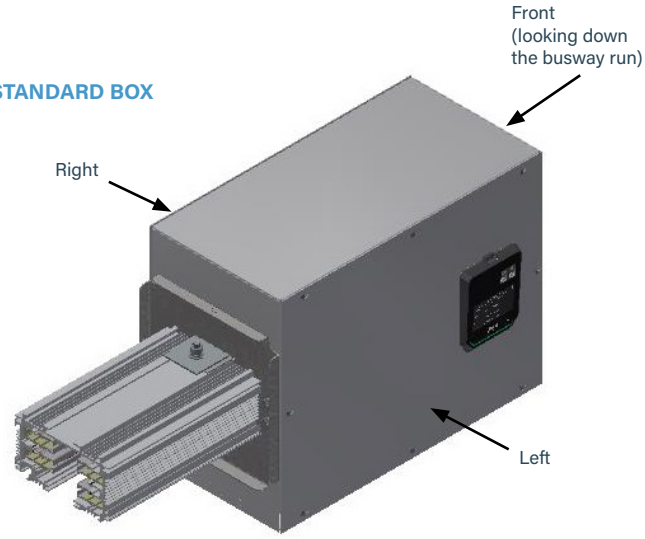
Wired ethernet and serial communications are standard with (2) RJ11 and (2) RJ45 jacks built in for easy daisy chaining. Optional 802.11n Wi-Fi connectivity is also available. Both serial Modbus and Ethernet-based protocols can be used simultaneously. These include: SNMP (v1, v2 & v3), Modbus RTU and TCP/IP, BACnet, HTTPS, and SSH.

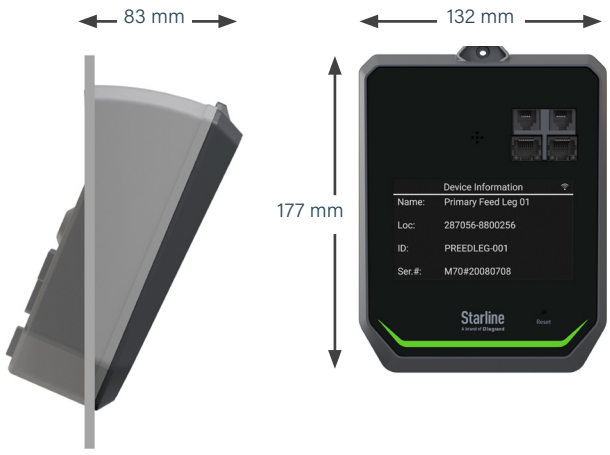
Firmware communication options (IPV4, IPV6, DHCP, WPA2) are pre-packaged into the meter build. While these options are selected and then enabled during factory assembly, they can be re-configured at any time in the field. The M70 CPM is compatible with all major DCIM and BMS packages.

The M70 CPM can also be complemented with end feed accessories, such as real-time lug temperature monitoring, IR window scanning and audible alarms. Unlike firmware options, these hardware features are not field changeable.

The M70 is available in 110-500vac, 48vdc and 380vdc versions.

STANDARD BOX





*The above arrows show how to determine your meter location on an end feed *(Refer to option 9. Meter Location on* **page 4.79** *End Feed Units: Product Numbers).*

1250T5 SYSTEMS

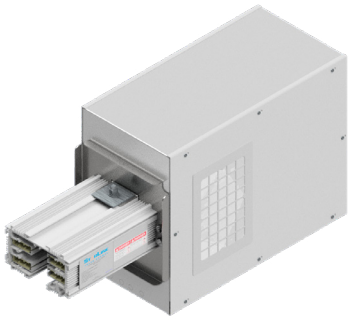
END FEED UNITS: ACCESSORIES

IR WINDOWS

Starline Track Busway Polymer IR Window systems use a proprietary stack-up of advanced materials to ensure highest levels of safety and optimal infrared thermography of critical connections.

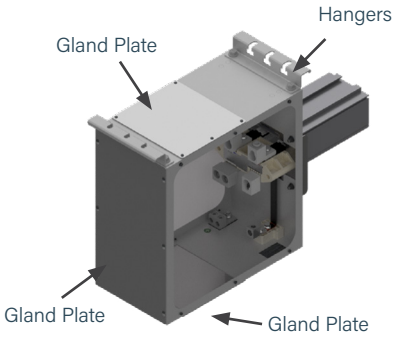
When paired with Starline's monitoring and service solutions, a complete and effective maintenance program can be developed that further reduces downtime lowers total cost of ownership, and provides increased safety for the end-user.

Safely and accurately scan connection points while the system is under load, without exposing the operator to live connections.



END FEED HANGERS & GLAND PLATES

End feed hangers & aluminum cable gland plates, located on the top, bottom and back of the end feed, can now be added as an optional accessory to Starline end feeds. These features make installation fast and easy and can be paired with other Starline end feed accessories.



FEATURES & BENEFITS

- Allows for safe IR scanning without powering down busway
- Complete system coverage with IR windows for plug-in units and end feeds
- End feed IR windows designed in 2 sizes for optimized viewing angles
- Cost effective design allows for quick end user ROI
- ETL Listed, CE Marked
- Lower TCO
- Enhanced safety
- Effective preventative maintenance

GENERAL SPECIFICATIONS	
Viewing Material	IR transmissive polymer, UL 94B HB Rated
Structural Mesh Material	Stainless Steel 304
Body Material	Powder Coated Steel or Aluminum (matched to busway or plug-in unit color)
Ingress Protection	IP3x (T5); IP54 (S5)
Max Operating Temperature	125°C
WINDOW DIMENSIONS	
End Feeds: 400A and Below	5" (127mm) x 7" (178mm)
End Feeds: 630A and Above	8" (203mm) x 12" (305mm)

*(Refer to option 17. M70 Options on **page 4.80** End Feed Units: Product Numbers)*

*(Refer to option 10. Accessories Package on **page 4.79** End Feed Units: Product Numbers)*

1250T5 SYSTEMS

END FEED UNITS: PRODUCT NUMBERS

M	F	1K2	T5	H	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M035	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

1. System *(standard of measure)*

M Metric

2. Product Type *(section component)*

F End Feed

3. Product Frame *(maximum amperage)*

1K2 1250 amps

4. Compatibility *(frame compatibility)*

T5 T5 Series
K5 T5 Series (Limiting Strip)

5. Material *(busbar material)*

H Hybrid (Cu/Al)

6. Neutral/Ground Busbar *(size of neutral busbar and/or ground)*

4 3 Phase plus Neutral
G 3 Phase plus Neutral plus Internal Ground Conductor

7. Polarization *(orientation of section for mating purposes)*

S Standard
R Reversed

8. Lug/Box Options *(standard/double/bolt lugs and box size)*

S Standard lugs, Standard box
B Bolt lugs, Standard box

9. Meter Location *(from the terminal, side with removable lid)*

R Right
N None (N/A)
L Left

10. Accessories Package *(optional accessories for feed units)*

S Standard
C IR Window - Circular
F End Feed Hanger & Gland Plates
U Starline Rect. IR window, 8" (203mm) x 12" (305mm)
B (C+F)
P (U+F)

11. Accessories Location *(from the terminal, side with accessory)*

N None (N/A)
L Left
R Right
F Front (consult the factory)

12. Straight Length *(length of section)*

M035 .35 meters

13. Busway Access

C Continuous

14. Paint Color *(allows painting of the busway housing)*

STD Paint Factory Silver
BLK Paint Factory Black
WHT Paint Factory White
RED Paint Factory Red
BLU Paint Factory Blue
****RAL** *(please see page 4.81)*

15. Tape Marking *(colored tape on both sides of busway housing)*

0 None

EXAMPLE

MF1K2T5H4R-SRUL-M035C-BLK0 = *Metric System, End Feed, 1250 amps, T5 Series, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .35 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking*

1250T5 SYSTEMS

END FEED METERING: PRODUCT NUMBERS

M	F	1K2	T5	H	4	S	–	S	N	S	N
1. System	2. Product Type	3. Product Frame	4. Compatibility	5. Material	6. Neutral/ Ground Busbar	7. Polarization		8. Lug/Box Options	9. Meter Location	10. Accessories Package	11. Accessories Location

–	M035	C	–	STD	0	–	M73	00	1	*Optional
	12. Straight Length	13. Busway Access		14. Paint Color	15. Tape Marking		*16. Meter Release	*17. Meter Options	*18. System Config. and CT Type	

*16. Meter Release *(M70 AC)*

M73 (2) RJ11, (2) RJ45, Lg. Display, 480vac
M76 (2) RJ11, (2) RJ45, Lg. Display, 480vac + Wi-Fi

*16. Meter Release *(M70 DC)*

M7C (2) RJ11, (2) RJ45, Lg. Display, 48vdc
M7F (2) RJ11, (2) RJ45, Lg. Display, 48vdc + Wi-Fi
M7J (2) RJ11, (2) RJ45, Lg. Display, 400vdc
M7M (2) RJ11, (2) RJ45, Lg. Display, 400vdc + Wi-Fi

*17. Meter Options *(M70 AC and DC)*

0A IPV6
0B DHCP
0C WPA2E
0E IPV6 + DHCP
0F IPV6 + WPA2E
0J DHCP + WPA2E
0H IPV6 + WPA2E + DHCP

00 Standard Features (IPV4 + No Accessories)
10 Lug Temp
30 Audible Alarm
A0 Lug Temp + Audible Alarm

1A Lug Temp + IPV6
1B Lug Temp + DHCP
1C Lug Temp + WPA2E
1E Lug Temp + IPV6 + DHCP
1F Lug Temp + IPV6 + WPA2E
1J Lug Temp + DHCP + WPA2E
1H Lug Temp + IPV6 + WPA2E + DHCP

3A Audible Alarm + IPV6
3B Audible Alarm + DHCP
3C Audible Alarm + WPA2E
3E Audible Alarm + IPV6 + DHCP
3F Audible Alarm + IPV6 + WPA2E
3J Audible Alarm + DHCP + WPA2E
3H Audible Alarm + IPV6 + WPA2E + DHCP

AA Lug Temp + Audible Alarm + IPV6
AB Lug Temp + Audible Alarm + DHCP
AC Lug Temp + Audible Alarm + WPA2E
AE Lug Temp + Audible Alarm + IPV6 + DHCP
AF Lug Temp + Audible Alarm + IPV6 + WPA2E
AJ Lug Temp + Audible Alarm + DHCP + WPA2E
AH Lug Temp + Audible Alarm + IPV6 + WPA2E + DHCP

*18. System Configuration and CT Type *(M70 AC)*

2 Δ, Solid CTs, 5A-secondary, No Measured Neutral
4 Δ, Split CTs, 5A-secondary, No Measured Neutral
6 Y, Solid CTs, 5A-secondary, No Measured Neutral

8 Y, Split CTs, 5A-secondary, No Measured Neutral
A Y, Solid CTs, 5A-secondary, Measured Neutral
C Y, Split CTs, 5A-secondary, Measured Neutral

M73
(2) RJ11, (2) RJ45, Lg. Display

M76
Wi-Fi + (2) RJ11, (2) RJ45, Lg. Display

EXAMPLE

MF1K2T5H4R-SRUL-0102C-BLK0-M73001 = *Metric System, End Feed, 1250 amps, T5 Series, Hybrid, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Standard Box, Right Meter Location, Rectangular IR window, Left Accessory Location, .35 meter Straight Length, Continuous Busway Access, Painted FactoryBlack, No Tape Marking, M73 Meter with Display, Standard Features, Delta, Solid CTs, Millivolt, No Measured Neutral*

T5 SERIES

RAL COLORS

1ST CHARACTER	
P	Paint

2ND CHARACTER	
0	100
1	101
2	102
3	103
4	200
5	201
A	300
B	301
C	302
D	303
E	400
F	401
G	500
H	501
J	502
K	600
L	601
M	602
N	603
P	700
Q	701
R	702
S	703
T	704
U	800
V	801
W	802
X	900
Y	901
Z	902

3RD CHARACTER	
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

4TH CHARACTER	
0	0

EXAMPLE:

P B 2 0 = Paint RAL 3012

T5 SERIES

ACCESSORIES: SUPPORT HARDWARE

THREADED ROD

For mounting to M12 threaded rod. Twist-in design. Can be inserted anywhere along the top full-access slot of busway. Maximum hanger support spacing is every 3 meters.

Part Number
250, 400, 630 & 800 amp systems only:
MBRHT5-M12
Available in plain zinc
or black (-BLK)
Weight
.14 kg

SEISMIC THREADED ROD

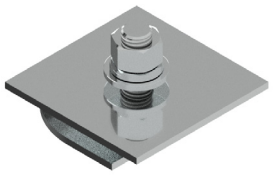
For mounting to M12 threaded rod. Can be inserted anywhere along the top full access slot of busway, and includes a seismic brace. Hanger support is required every 3 meters maximum on every section of busway.

Part Number
250, 400 & 630 amp systems only:
MBRH-M12
Available in plain zinc
or black (-BLK)
Weight
.14 kg

STANDARD

For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top full-access slot on the busway. Hanger support is required every 3 meters maximum.

Part Number
250, 400, 630 & 800 amp systems only:
MBHT5-M12
Available in plain zinc
or black (-BLK)
Weight
.09 kg



STANDARD ONE-PIECE, SLOTTED

For mounting to strut or other flat surfaces. Twist-in design allows inserting anywhere along the top full-access slot on the busway. Hanger support is required every 3 meters maximum.

Part Number
(Available for all systems,
required for 1000 & 1250):
MBSHT5-4
Available in plain zinc
or black (-BLK)
Weight
.09 kg

WALL MOUNT BRACKET

For mounting to walls, using standard hangers. Hanger support is required everything 3 meters maximum.

Part Number
WMBT5-9

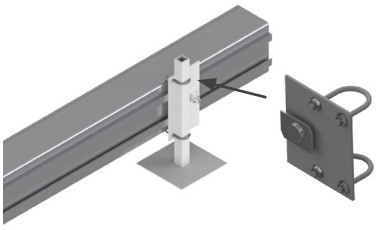
T5 SERIES

ACCESSORIES: SUPPORT HARDWARE

RAISED MOUNTING BRACKET

For mounting the busway horizontally (with access slot facing to the side) for under floor applications.

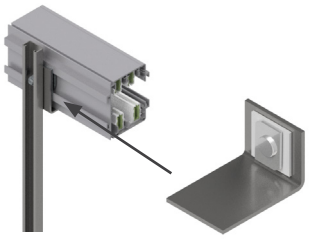
Part Number
250, 400, 630 & 800 amp systems only:
MRFBT5-2
Available in plain zinc or black (-BLK)
Weight
.09 kg



SIDE MOUNT BRACKETS

Mounted to vertical supports.

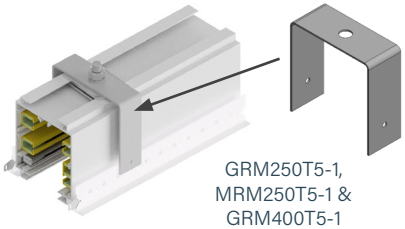
Part Number
250, 400, 630 & 800 amp systems only:
MBSST5-12
Available in plain zinc or black (-BLK)
Weight
.09 kg



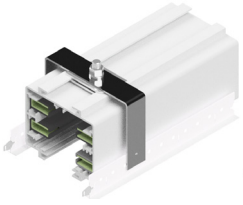
RECESSED SUSPENDED CEILINGS

For hanging busway into a recessed ceiling.

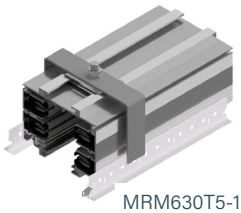
**Hanger bolt must be ordered separately*



GRM250T5-1, MRM250T5-1 & GRM400T5-1



MRM400T5-1 & GRM630T5-1



MRM630T5-1

Part Numbers
(for 250 amp global & metric systems):
GRM250T5-1 *MRM250T5-1*

(for 400 amp global & metric systems):
GRM400T5-1 *MRM400T5-1*

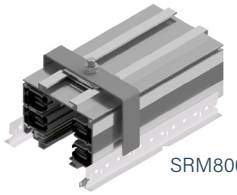
(for 630 amp global & metric systems):
GRM630T5-1 *MRM630T5-1*

(for 800 amp systems):
SRM800T5-1

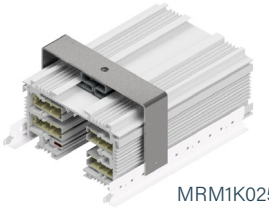
(for 1000 amp systems):
GRM1K025-1 *MRM1K025-1*

(for 1250 amp systems):
SRM1K2T5-1

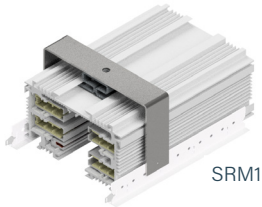
Available in plain zinc or black (-BLK)



SRM800T5-1



MRM1K025-1



SRM1K2T5-1

T5 SERIES

ACCESSORIES: SUPPORT HARDWARE

PRODUCT DESCRIPTION

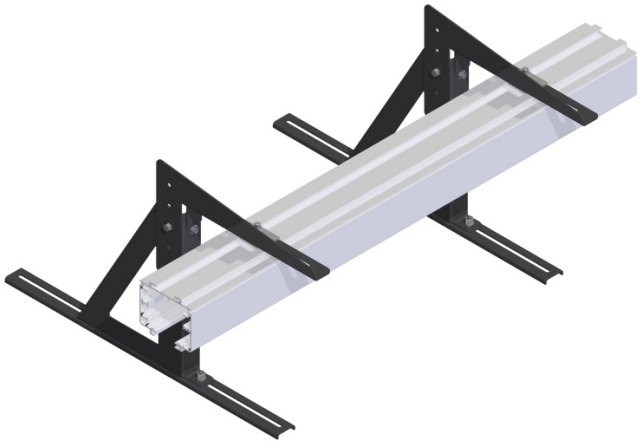
UNIVERSAL SERVER CABINET MOUNTING BRACKETS

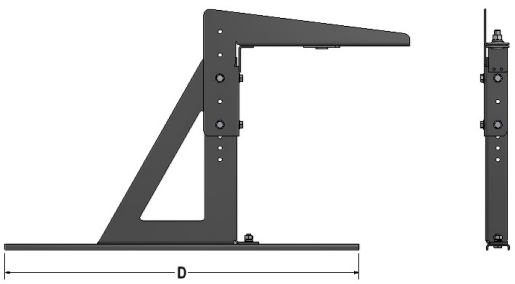
The universal server cabinet mounting brackets are designed with generous 9.5 millimeter wide through slots to mount directly onto virtually any server cabinet.

These accessories quickly and easily provide a flexible busway mounting solution on top of server cabinets, eliminating the need for threaded rod and strut support from the ceiling.

The brackets are adjustable in height, can be ordered in virtually any color, and can be positioned at any depth on the server cabinet. Moreover, they can accommodate up to 2 runs of 250 or 400 amp busway, and 1 run of 630, 800, 1000 or 1250 amp busway.

Hanger Bolt Included – MBHT5-1





MATERIAL
Galvanneal Steel
HEIGHT
449 mm Min 603 mm Max Maximum Spacing: Every 3 m per run

C: Color *(1, 3, 4, 6, 7)*

1	Anodized Silver	**6**	Red
3	Black	**7**	Blue
4	White		

**consult factory for custom colors*

Part Number
Metric: MUSCMB-(X)-(D)-(C)

X = System (T5)
D = Depth (762mm, 914 mm, 1067 mm, 1219 mm or custom length)
C = Color (1, 3, 4, 6, 7)

EXAMPLES

MUSCMB-T5-1219-7 = *Metric System, Universal Server Cabinet Mounting Bracket-T5 Series-1219 millimeter Depth, Blue*

MUSCMB-T5-914-1 = *Metric System, Universal Server Cabinet Mounting Bracket-T5 Series-914 millimeter Depth, Anodized Silver*

T5 SERIES

ACCESSORIES: CONNECTION HARDWARE

JOINT KIT

For the connection of adjacent busway sections. One kit is required at each joint. Each kit is comprised of a housing coupler pair and bus connector set.

Bus Connector: copper blades secured to an insulating mounting plate. This makes the electrical connection between sections.

Housing Couplers: consists of two 12-screw couplers-one for the top and one for the bottom. These make the mechanical connection between busway sections.

**Installation tool is required (see below)*
***Available in all standard and RAL colors*

Part Numbers
(for 250 amp global & metric systems):

GJK250T5-1	*MJK250T5-1*
GJK250T5G-1	*MJK250T5G-1*
GJK250T5N-1	*MJK250T5N-1*
GJK250T5F-1	*MJK250T5F-1*

(for 400 & 630 amp global & metric systems)

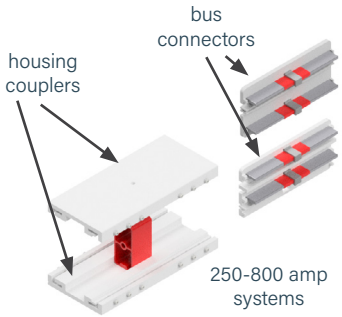
GJK400T5-1	*MJK400T5*
GJK400T5G-1	*MJK400T5G-1*
GJK400T5N-1	*MJK400T5N-1*
GJK400T5F-1	*MJK400T5F-1*
GJK630T5-2	*MJK630T5-2*
GJK630T5G-2	*MJK630T5G-2*

**G = copper, M = hybrid*
(for 800 amp systems)
MJK800T5-2
MJK800T5G-2

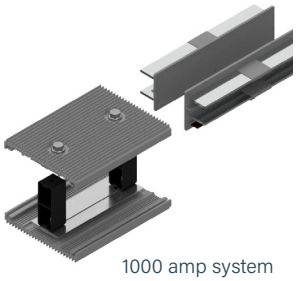
(for 1000 amp systems)

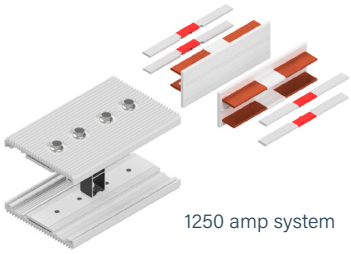
GJK1K0T5-1	*MJK1K0T5-1*
GJK1K0T5G-1	*MJK1K0T5G-1*

(for 1250 amp systems)
MJK1K2T5-1
MJK1K2T5G-1



250-800 amp systems


1000 amp system

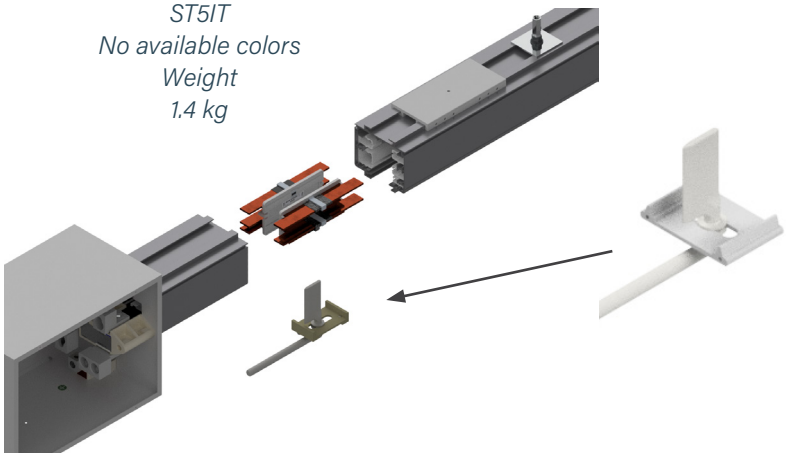

1250 amp system

INSTALLATION TOOL

An installation tool is used to install the bus connector between two adjacent sections of busway.

Busway sections are butted together and the top housing coupler is installed. The bus connector is inserted, centered and seated in the slot of the busway. The installation tool is inserted into the jointed intersection and rotated 90 degrees to form a secure electrical connection. The housing coupler is then positioned over the bottom joint and tightened.

Part Number
ST5IT
No available colors
Weight
1.4 kg

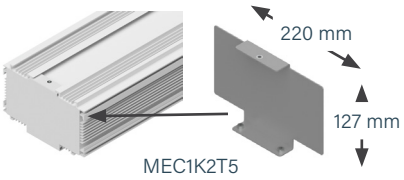


T5 SERIES

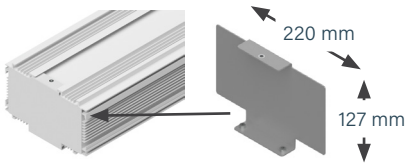
ACCESSORIES: CONNECTION HARDWARE

END CAP

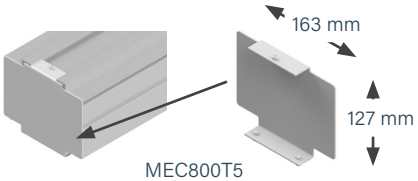
For covering the end of T5 busway systems.



MEC1K2T5



MEC1K0T5



MEC800T5

Part Numbers
(for 250 amp global & metric systems):
GEC250T5 *MEC250T5*

(for 400 amp global & metric systems):
GEC400T5 *MEC400T5*

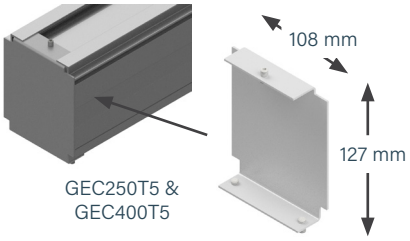
(for 630 amp global & metric systems):
GEC630T5 *MEC630T5*

(for 800 amp systems):
MEC800T5

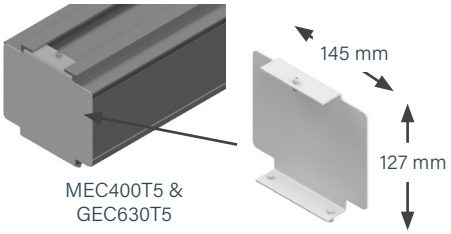
(for 1000 amp global & metric systems):
GEC1K0T5 *MEC1K0T5*

(for 1250 amp systems):
MEC1K2T5

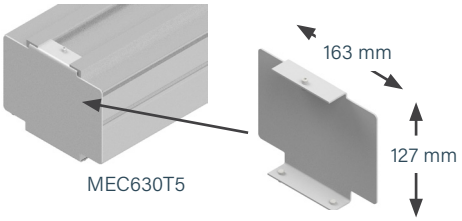
Available in all standard and RAL colors
Weight: .18 kg



GEC250T5 & GEC400T5



MEC400T5 & GEC630T5



MEC630T5

OPTIONAL CLOSURE STRIP

The closure strip snaps into the bottom access slot of T5 housing to close off access to power around the installed plugin units. It is normally shipped in 2.9 meter sections.

The closure strip is offered in both nonconductive plastic material and aluminum for 250, 400, 630 & 800 amp systems. It is only available in plastic for the 1000 & 1250 amp systems.

The aluminum closure strip affixes with an adhesive backing to the access slot of T5 housing.

Part Numbers
(for 250, 400, 630 & 800 amp systems):
SCST5-1
Aluminum closure strip:
SCST5-1-AL

(for 1000 & 1250 amp systems):
SCST5-2
-Plastic Closure Strip available in black & white
-Aluminum Closure Strip available in all standard colors

T5 SERIES

ADD-ON ACCESSORIES: DATA CHANNEL

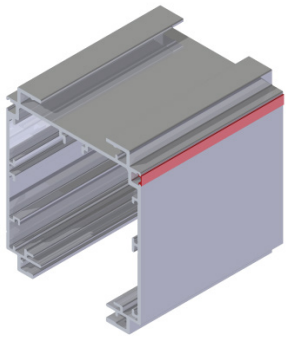
DATA CHANNEL COVER

The data channel cover is used to hold cables into position and hide them from view. It can also be used for a variety of busway identification applications, and it is available in many different colors.

The data channel cover is available in lengths of 3 meters.

Please contact sales to order the quantity needed.

Part Number
MDCCT5-3-SIL (silver)
MDCCT5-3-BLK (black)
MDCCT5-3-GRN (green)
MDCCT5-3-YEL (yellow)
MDCCT5-3-W (white)
MDCCT5-3-RED (red)
MDCCT5-3-BLU (blue)



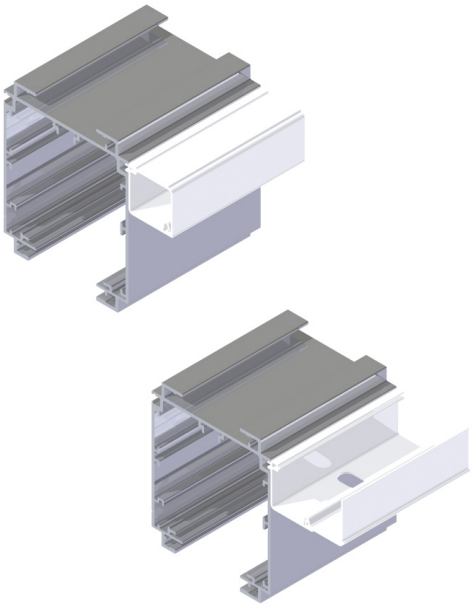
HINGED WIRE WAY

The hinged wire way provides a seamless, integrated cable management solution that allows users to easily route cabling while leaving it easily accessible and identifiable. Discreet slots located every 150 millimeter provide built-in accessibility for cable drops.

The hinged wire way is available in lengths up to 3 meters.

Please contact sales to order the quantity and length needed.

Part Number
MHWWT5-3
Available in gray only



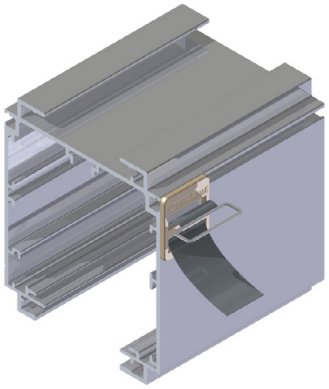
T5 SERIES

ADD-ON ACCESSORIES: DATA CHANNEL

DATA CABLE STRAP

The data cable strap provides a seamless, integrated cable management solution that allows users to easily route cabling while leaving it easily accessible and identifiable. The 305 millimeter adjustable velcro strap can accommodate a wide variety and quantity of cables, and can be easily positioned along the busway to accommodate various cable management needs.

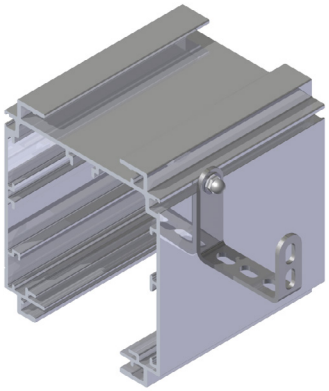
Part Number
SVCST5-12
Available in gray, with a black colored strap only



MULTI USE MOUNTING BRACKET

The multi use mounting bracket is an all-purpose bracket that easily attaches to any position on the busway. The bracket comes with 6.5 millimeter slotted holes throughout to allow for the attachment of a wide variety of accessories. Each bracket is capable of supporting a load of 12 kg. The multi use mounting bracket is commonly used for suspending compressed air lines, tap box cable management and suspending accessory lighting.

Part Number
SMMBT5-1
Available in plain zinc or black (-BLK)



T5 SERIES

SERVICES

Regular servicing of busway systems is crucial for ensuring that your system performs at its best. By conducting regular maintenance, you can identify and address any potential issues before they turn into expensive problems, thus saving you time and money in the long run. Regular servicing can help extend the lifespan of your busway system, ensuring that it meets safety standards and complies with regulations. Choose from various offerings and customize a service plan that works best for you.

WE ARE CURRENTLY OFFERING THE FOLLOWING SERVICES:

COMMISSIONING AND EQUIPMENT RENTALS

Designing a mission-critical facility involves a significant investment of time and money. Through comprehensive commissioning services, Starline can help guarantee your project delivers the outcomes you expect.

Whether you need rental equipment to test your busway system or certified technicians to perform the testing, Starline has you covered. Choose from our inventory of load bank tap-offs and associated gear, or work with a Starline Engineer to customize and perform a commissioning plan to fit your specific needs.

METER SERVICES

Starline's certified technicians make optimizing your meters' performance and functionality a breeze. Our comprehensive on-site meter programming service includes inspecting, programming, reporting, and optional retrofitting services for you existing systems.

STARTUP AND SYSTEM CERTIFICATION

At Starline, we are committed to ensuring the success of your project. Our team understands the risks associated with the energization of systems, which is why we've designed a rigorous certification process to inspect, test and report on your Starline Busway and Critical Power Monitor ("CPM") products. Our certification process proactively identifies and prevents any potential issues before they happen.

To ensure the long-term success of your project, it is crucial to have Starline-certified technicians inspect and validate the installation before full commissioning. Level 2 and 3 commissioning ensures the installation complies with safety requirements and meets factory standards for ongoing reliability.

- Double the length of the standard factory warranty
- Ensure all joint and feed connections are properly installed with continuity testing
- Ensure proper installation of all plug-in units
- Validate that system will perform to your specified requirements
- Full certification report delivered electronically at conclusion of service

TURNKEY INSTALLATION SERVICES

Our trained and factory certified Busbar installers are looking forward to completing your next job. You can order your best-in-class power distribution system and leave the rest to us. Our technicians will complete your installation quickly and safely and will reduce your overall TCO by extending your product warranty.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services.**

T5 SERIES

SERVICES

PREVENTATIVE MAINTENANCE PLANS AND IR SCANNING

Although Starline busway is expertly designed to require less maintenance, NETA ATS and MTS guidelines recommend conducting annual inspections and health assessments on all critical equipment. Yearly preventative maintenance helps to ensure your system's long-term reliability and safety.

Starline's FLIR-certified technicians will create a custom preventative maintenance plan for your specific needs. Our certified technicians will work to:

- Identify thermal anomalies
- Extend equipment lifecycle
- Ensure optimal system performance
- Improve facility safety and operational sustainability

Upon completing your preventative maintenance plan, you may be eligible to extend your product warranty.

ON-SITE INSTALLATION SUPPORT

Starline's on-site installation service makes installing your busway as quick and easy as possible.

Our installation support starts with scheduling a preliminary trip to the installation site. During the initial visit, our certified technicians will train your installing contractor and develop a thorough installation and commissioning plan.

After completing the training, your installing contractor will have a direct line of communication with our installation experts. Our experts can help answer questions and provide hands-on guidance when needed.

Opting for Starline's installation support helps mitigate the installation risk and reduces the learning curve typically associated with new installations.

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T5 SERIES

SERVICES

ON-SITE PRODUCT TRAINING

At Starline, we offer comprehensive on-site product training services facilitated by our team of certified technicians. With their extensive expertise and commitment to upholding our high factory standards, you can confidently rely on them to ensure your and your systems' reliability and operational safety.

Our training programs equip your team with the knowledge and skills necessary to operate and maintain your systems effectively. Through hands-on demonstrations and interactive sessions, our certified technicians will guide your staff in understanding the intricate workings of the products and address any questions or concerns your team may have during the training process.

By choosing our on-site product training services, you are investing in your system's and operations' long-term success.

RECERTIFICATION AND EXTENDED WARRANTY PLANS

Starline's recertification and extended warranty options provide best-in-class coverage for all of your Starline products and systems. Our extended warranty plans safeguard your investment beyond the standard warranty timeframe, offering you peace-of-mind while our recertification programs help mitigate risk and downtime. Whether the busway has been installed for years or you are relocating to another building, Starline is here to help.

Choose from one of our flexible one to four-year plans or have your system recertified anytime. Contact your Starline rep for more information.

Contact your Starline Representative today to add services to your Track Busway order, or download the detailed Statement of Work documents at **downloads.starlinepower.com/services**.

Starline, a brand of Legrand, has been a leader in power distribution since 1924. The company's founders led the way for many new technologies in the power distribution equipment industry. Today, Starline continues to pave the way for safer, more innovative and more reliable electrical power distribution systems. Visit StarlinePower.com to learn more about our flexible power solutions.

Starline®
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