



Starline®
A brand of **legrand**

Track Busway Product Selection Guide

250A & 400A T5 GLOBAL SYSTEMS

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

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T5 ACCESSORIES

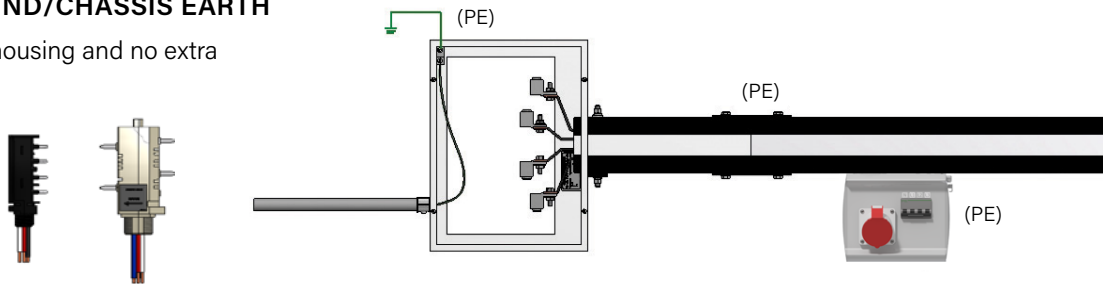
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T5 SERIES

EARTH/GROUND OPTIONS

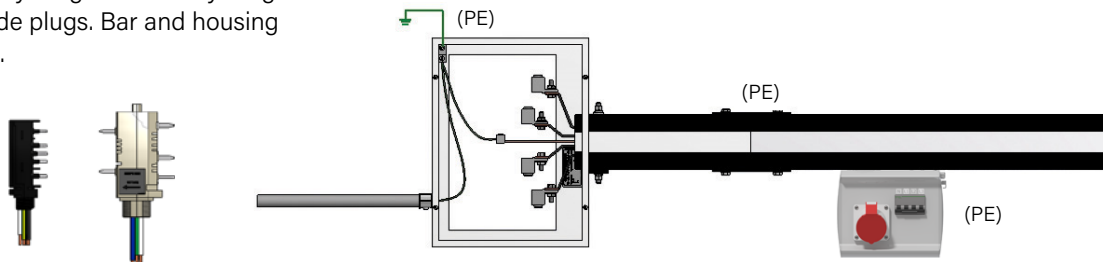
■ CASE GROUND/CHASSIS EARTH

Uses aluminum housing and no extra copper bar.



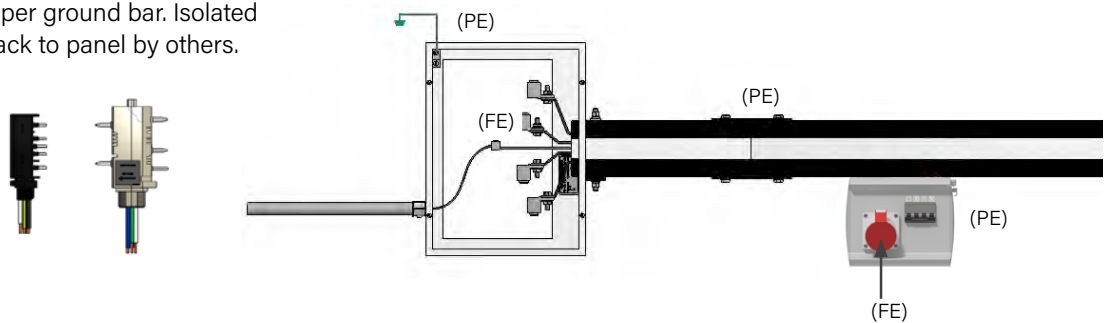
■ DEDICATED GROUND/EARTH

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

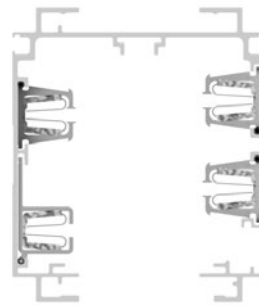
Starline utilizes a unique polarizing method to prevent mismatched components from being inadvertently connected to each other. The system is designed to prevent cross phasing during installation.

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.

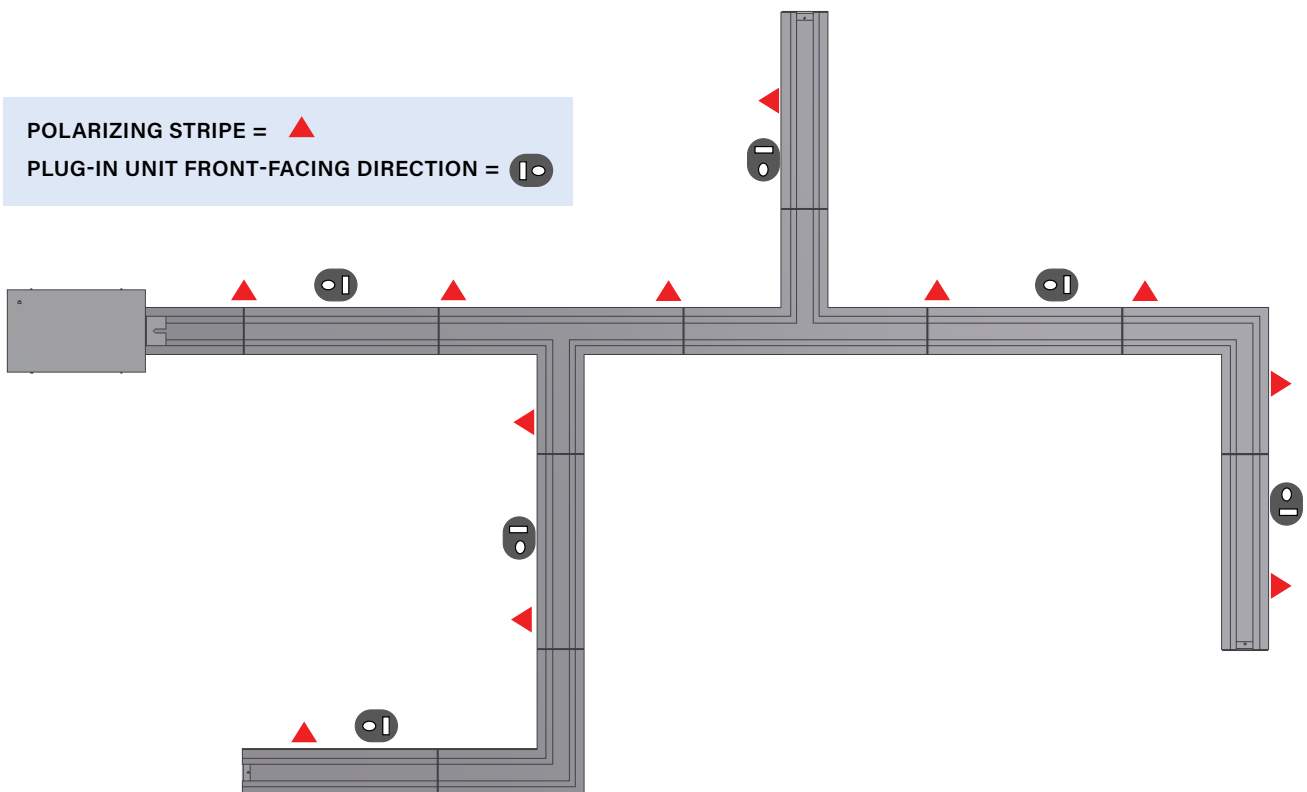


A standard plug-in unit will always face the polarizing strip



Polarizing Strip

POLARIZING STRIPE = ▲
PLUG-IN UNIT FRONT-FACING DIRECTION = ◯



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 4.81** 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.

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COMPONENT RELATIONSHIP TIPS

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

EXAMPLES

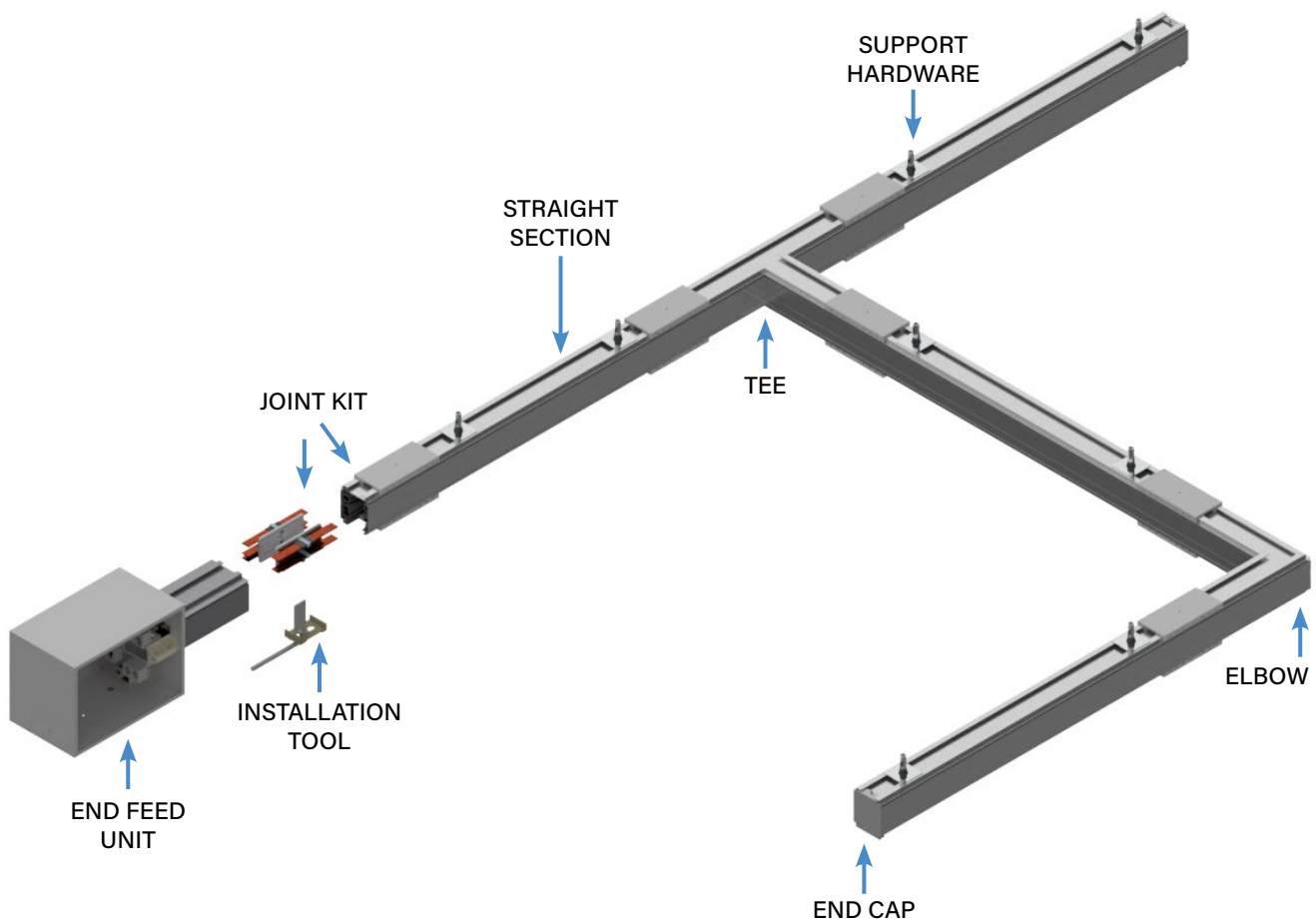
- The T5 series of plug-in units are compatible with all T5 busway systems
- Each piece of housing (straights and elbows) requires a joint kit (containing two housing couplers and one bus connector). Determine the total number of housing sections (regardless of length) as this becomes the number of joint 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 4.5** 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

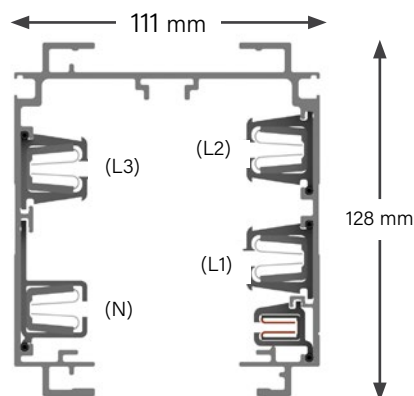
STRAIGHT SECTIONS

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.

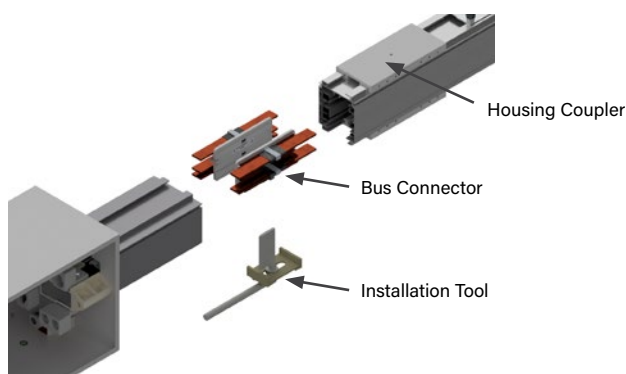


GLOBAL & METRIC SYSTEM



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
L3 or Phase C		gray
Neutral Ground		blue
		green/yellow



STRAIGHT SECTIONS: PRODUCT NUMBERS

1. System <i>(standard of measure)</i> G Global M Metric		9. Busway Access <i>(how plugs access the busway)</i> C Continuous	
2. Product Type <i>(section component)</i> S Straight Section		10. Paint Color <i>(allows painting of the busway housing)</i> STD Factory Mill Finish RED Paint Factory Red BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL <i>(please see page 4.80)</i> <i>**Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems</i>	
3. Product Frame <i>(maximum amperage)</i> 250 250 amps		11. Tape Marking <i>(colored tape on both sides of busway housing)</i> 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	
4. Compatibility <i>(frame compatibility)</i> T5 T5 Series K5 T5 Series (Limiting Strip)			
5. Material <i>(busbar material)</i> C Copper			
6. Neutral/Ground Busbar <i>(size of neutral busbar and/or ground)</i> 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 <i>(orientation of section for mating purposes)</i> S Standard			
8. Straight Length <i>(length of section)</i> MXYY X = meters, YY = centimeters			

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

END FEED UNITS

PRODUCT DESCRIPTION

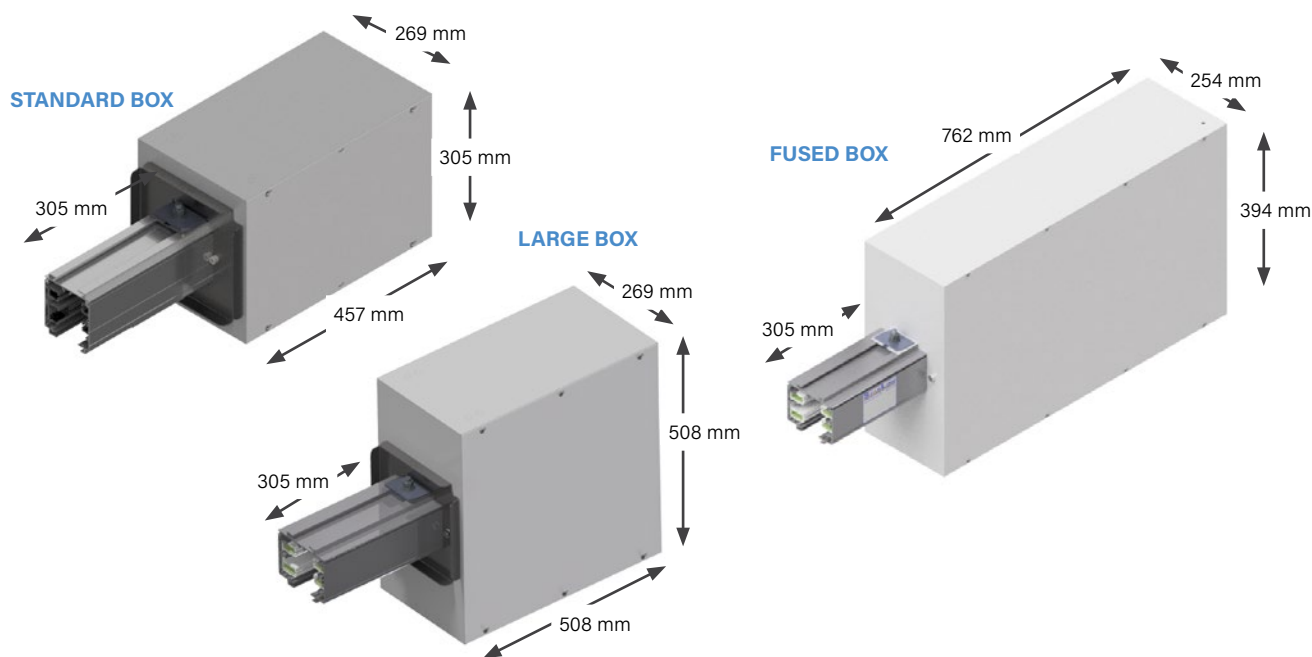
End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a 305 millimeter section of busway. The assembly includes connection lugs and a ground lug for wires up to 150 mm² for standard size boxes 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

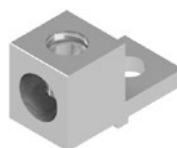
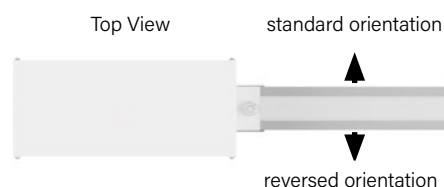


	BOXES		
LUGS	Standard	Large	Fused
Standard	S	L	F
Double			
Bolt*	B	R	

Box size and Lug options: Refer to option 8. Lug/Box Options on **page 4.18**
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"

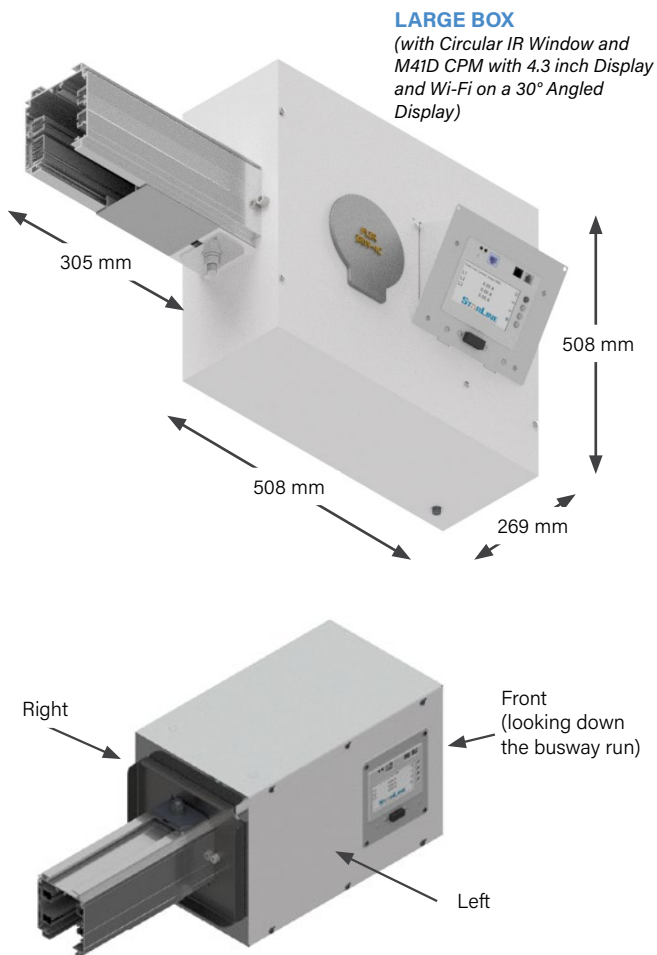
250T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End 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 mm² for standard size boxes and large size boxes.

The M40 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



AC END FEED METER OPTIONS

- M41** Wi-Fi, ≤415V Y, ≤240V Δ
- M43** No Wi-Fi, ≤415V Y, ≤240V Δ
- M45** Wi-Fi, 600V Y, 347V Δ
- M47** No Wi-Fi, 600V Y, 347V Δ Y = wye, Δ = delta

DC END FEED METER OPTIONS

- M61** Single Eth./Wi-Fi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/- 190VDC)
- M63** Single Eth./No Wi-Fi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/- 190VDC)
- M67** Dual Eth., single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)
- M69** Dual Eth/Dual Modbus, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)

BOX/LUGS OPTION	1 Meter or Accessory	1 Meter & 1 Accessory (opposite lids)	1 Meter & 1 Accessory (same lid)
(S) Standard Box, Standard Lugs	X	X	
(L) Large Box, Standard Lugs	X	X	X
(R) Large Box, Bolt Lugs	X	X	X

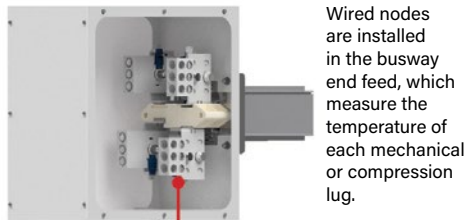
*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.18** End Feed Units: Product Numbers)

250T5 SYSTEMS

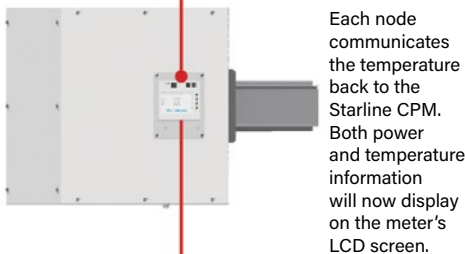
END FEED UNITS: ACCESSORIES

■ TEMPERATURE MONITOR

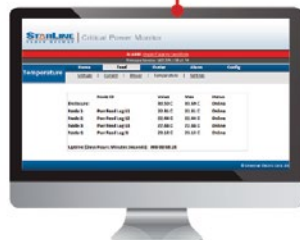
Temperature sensor technology is now available with the Starline Critical Monitor (CPM) for End Feeds. This innovative technology is a first of its kind; making the monitoring and viewing of temperature data instantaneous.



Wired nodes are installed in the busway end feed, which measure the temperature of each mechanical or compression lug.



Each node communicates the temperature back to the Starline CPM. Both power and temperature information will now display on the meter's LCD screen.



Temperature data also automatically transfer to the CPM's integral webpage—placing timely data at the end users fingertips.

(Refer to option 17, M40 Options on **page 4.19** End Feed Units: Product Numbers)

■ ANGLED METER LID

The angled meter End Feed lid is an accessory that delivers the flexibility to change the viewing angle for Display Meters in an End Feed.

This enclosure allows for the meter to be mounted flush to the End Feed lid or presented in an extended position at 30° from vertical. This presents a more comfortable and easier viewing angle when looking up at an End Feed unit to read the LCD screen.



(Refer to option 10, Accessories Package on **page 4.18** End Feed Units: Product Numbers)

■ IR WINDOWS

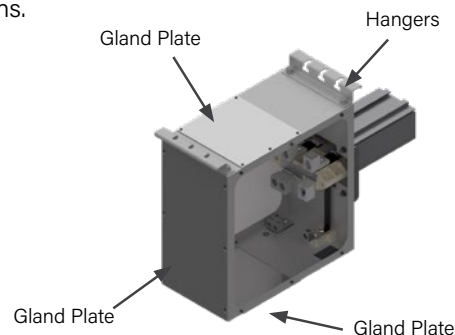
IR windows added to End Feeds offer:

- Enhanced electrical safety
- Reduced PPE
- Closed-door infrared inspections
- Stable and consistent transmission over product life
- Largest field of view of any IR window
- Supports visual and infrared imaging for any IR camera



■ 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. This option should also be chosen for seismic applications.



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
<div> <div>-</div> <div>M030</div> <div>C</div> <div>-</div> <div>STD</div> <div>0</div> <div>-</div> <div>M41</div> <div>S</div> <div>1</div> <div><i>*Optional</i></div> </div>											
		12. Straight Length	13. Busway Access	14. Paint Color		15. Tape Marking		*16. Meter Release	*17. M40 Options	*18. System Config. and CT Type	

1. System <i>(standard of measure)</i> G Global M Metric		10. Accessories Package <i>(optional accessories for feed units)</i> S Standard R IR Window - Rectangular C IR Window - Circular A Angled Meter Lid T IR (rect.) + Angled Lid L IR (circ.) + Angled Lid F End Feed Hanger & Gland Plates B (C+F) E (T+F) J (R+F) K (A+F) M (L+F)	
2. Product Type <i>(section component)</i> F End Feed			
3. Product Frame <i>(maximum amperage)</i> 250 250 amps			
4. Compatibility <i>(frame compatibility)</i> T5 T5 Series K5 T5 Series (Limiting Strip)		11. Accessories Location <i>(from the terminal, side with accessory)</i> N None (N/A) R Right L Left F Front (consult the factory)	
5. Material <i>(busbar material)</i> C Copper		12. Straight Length <i>(length of section)</i> M030 .3 meters <i>(For other lengths, consult the factory)</i>	
6. Neutral/Ground Busbar <i>(size of neutral busbar and/or ground)</i> 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		13. Busway Access C Continuous	
7. Polarization <i>(orientation of section for mating purposes)</i> S Standard R Reversed		14. Paint Color <i>(allows painting of the busway housing)</i> STD Factory Mill Finish RED Paint Factory Red BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL <i>(please see page 4.80)</i> <i>**Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems</i>	
8. Lug/Box Options <i>(standard/double/bolt lugs and box size)</i> 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		15. Tape Marking <i>(colored tape on both sides of busway housing)</i> 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	
9. Meter Location <i>(from the terminal, side with removable lid)</i> R Right L Left N None (N/A)			

GF250T5C4R-LRLL-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, Circular IR Window + Angled Meter Lid, 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 – M41 S 1 <i>*Optional</i>											
		12. Straight Length	13. Busway Access	14. Paint Color	15. Tape Marking	*16. Meter Release	*17. M40 Options	*18. System Config. and CT Type			

*16. Meter Release (M40/M60 Series Meters)

M41 Wi-Fi, ≤415V Y, ≤240V Δ
M43 No Wi-Fi, ≤415V Y, ≤240V Δ
M45 Wi-Fi, 600V Y, 347V Δ
M47 No Wi-Fi, 600V Y, 347V Δ
M61 Single Eth./Wi-Fi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)
M63 Single Eth./No Wi-Fi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)
M67 Dual Eth., single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)
M69 Dual Eth./Dual Modbus, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)

*17. Meter Options (M40 AC)

S Standard (M60s also)	F Featured (D+A)
D Display (M60s also)	E Enhanced (N+A)
N (Measured) Neutral	P Professional (D+N)
A Audible Alarm	U Ultimate (D+N+A)
B Temperature Monitor	C (B+D)
V (B+N)	M (B+A)
W (B+D+N)	1 (B+D+A)
2 (B+N+A)	3 (B+D+N+A)

*18. System Configuration and CT Type (line-line or line-neutral and wye or delta systems)

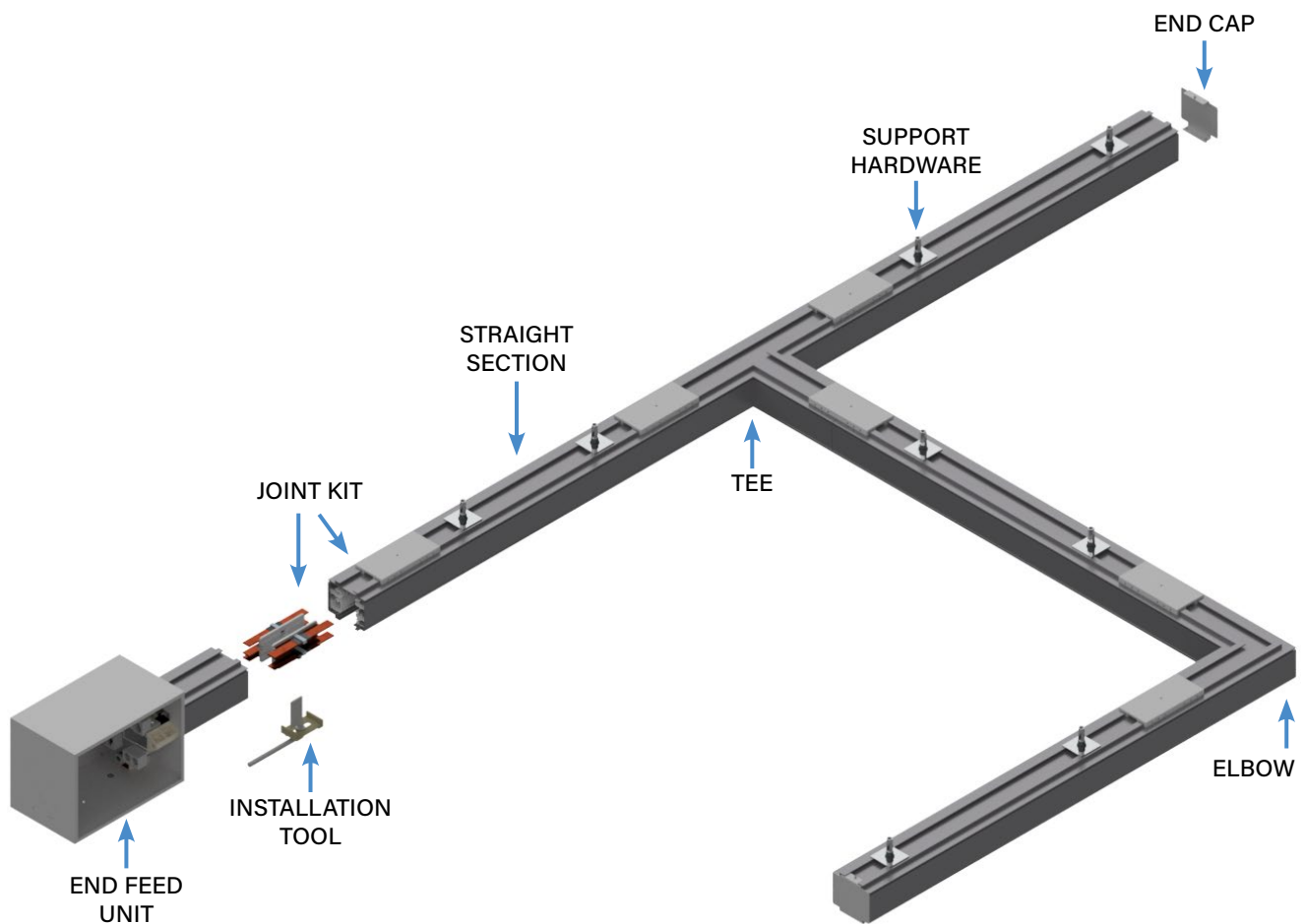
1 LLD - Standard, Milivolt	K LLD - Split Core, 5A
2 LLY - Standard, Milivolt	L LLY - Split Core, 5A
3 LNY - Standard, Milivolt	M LNY - Split Core, 5A
0 No CT's Present (Temp Monitors only)	1 Circuit 1 Only, Solid Core (M60s only)
2 Circuit 2 Only, Solid Core (M60s only)	3 Both Circuits, Solid Core (M60s only)

EXAMPLE

GF250T5C4R-LRLL-M030C-BLK0-M47S1 = Global System, End Feed, 250 amps, T5 Series, Copper Conductor, 3 Phase plus Neutral, Reversed Polarization, Standard Lugs, Large Box, Right Meter Location, Circular IR Window + Angled Meter Lid, Left Accessory Location, .3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking, M47 Meter, Standard Options, LLD- Standard, Milivolt

400T5 SYSTEMS

SYSTEM LAYOUT DRAWING



PLUG-IN UNITS

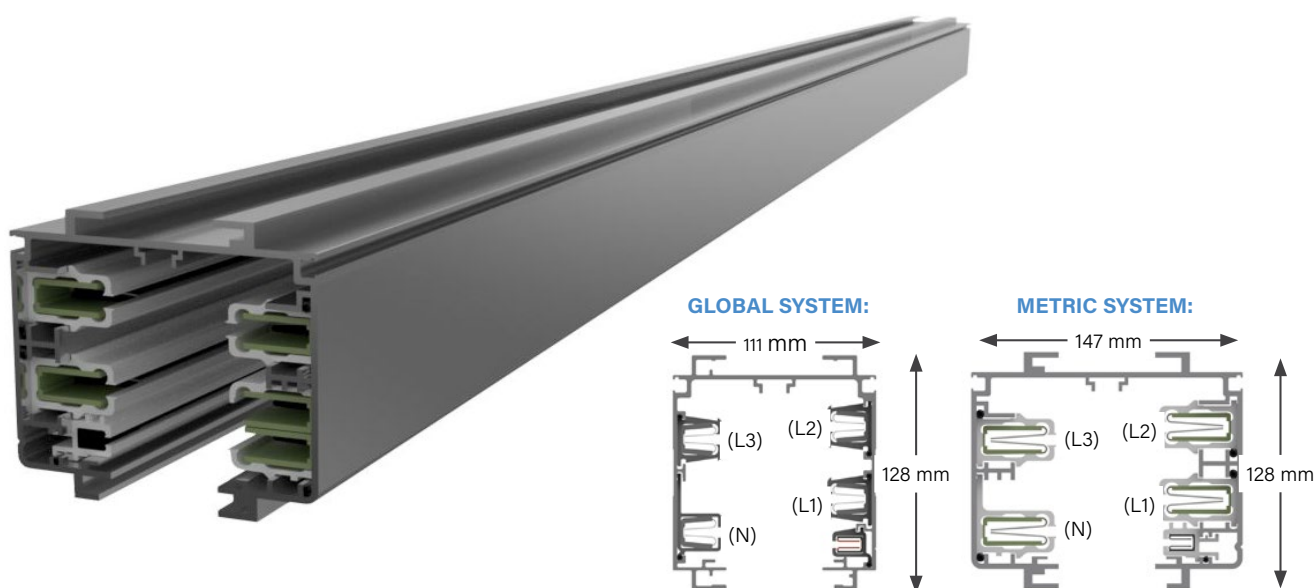
For further information on applicable T5 plug-in unit options, please consult the factory.

400T5 SYSTEMS






STRAIGHT SECTIONS

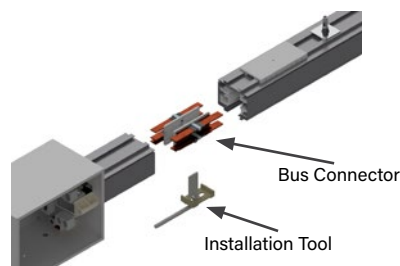
PRODUCT DESCRIPTION

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
L3 or Phase C		gray
L3 or Phase C		blue
Neutral Ground		green/yellow



STRAIGHT SECTIONS: PRODUCT NUMBERS

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

1. System <i>(standard of measure)</i> G Global M Metric		9. Busway Access <i>(how plugs access the busway)</i> C Continuous	
2. Product Type <i>(section component)</i> S Straight Section		10. Paint Color <i>(allows painting of the busway housing)</i> STD Factory Mill Finish* RED Paint Factory Red BLK Paint Factory Black BLU Paint Factory Blue WHT Paint Factory White **RAL <i>(please see page 4.80)</i> <i>**Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems</i>	
3. Product Frame <i>(maximum amperage)</i> 400 400 amps		11. Tape Marking <i>(colored tape on both sides of busway housing)</i> 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	
4. Compatibility <i>(frame compatibility)</i> T5 T5 Series K5 T5 Series (Limiting Strip)			
5. Material <i>(busbar material)</i> C Copper			
6. Neutral/Ground Busbar <i>(size of neutral busbar and/or ground)</i> 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 <i>(orientation of section for mating purposes)</i> S Standard			
8. Straight Length <i>(length of section)</i> MXYY X = meters, YY = centimeters			

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

END FEED UNITS

PRODUCT DESCRIPTION

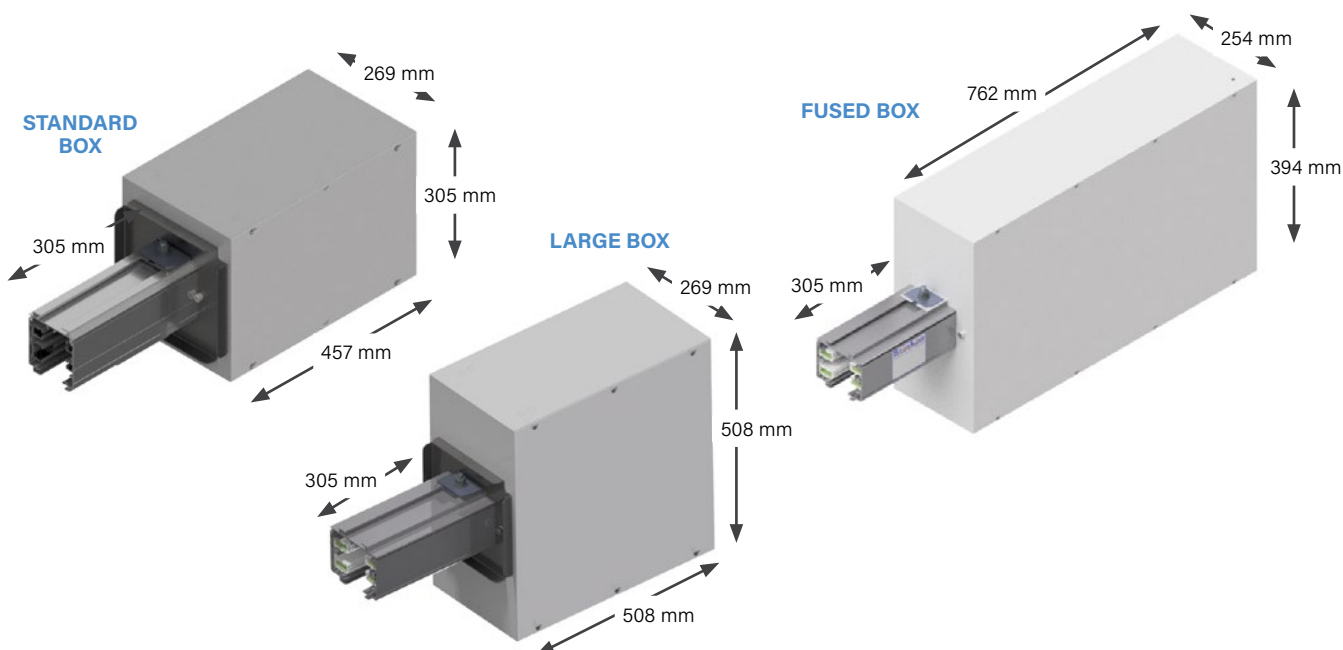
End power feed units connect to the end of the busway. A standard size, factory assembled unit consists of a steel junction box, with removable sides, connected to a .3 meter section of busway. The assembly includes connection lugs and a ground lug for wires 120 mm² or up to 300 mm² for standard size 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

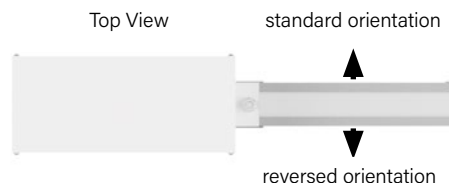


	BOXES		
LUGS	Standard	Large	Fused
Standard	S	L	F
Double			
Bolt*	B	R	

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"

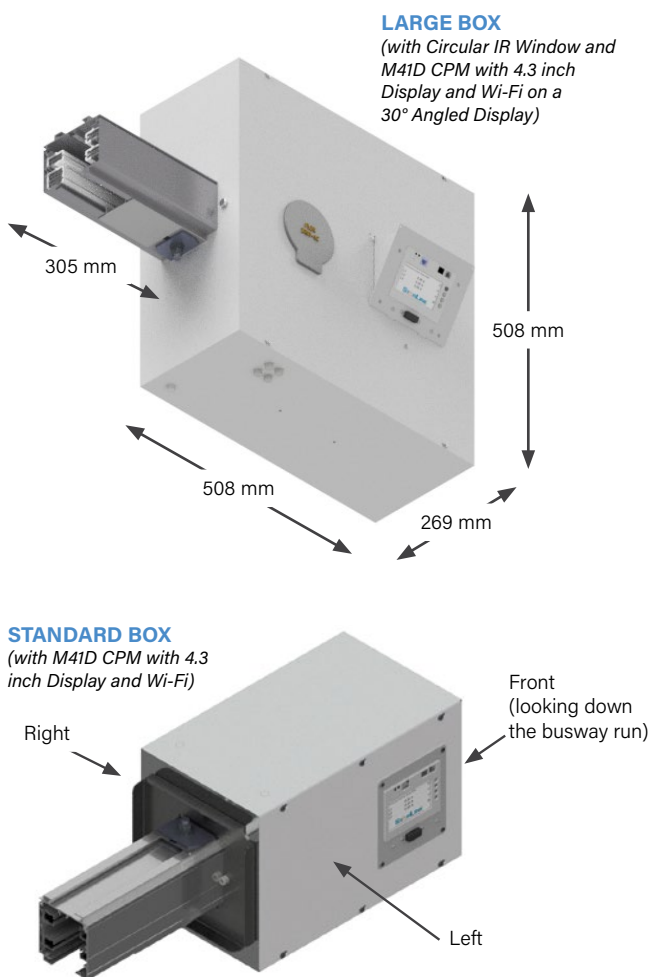
400T5 SYSTEMS

END FEED UNITS: METERING

PRODUCT DESCRIPTION

End power feed units connect to the end of the busway. A large size, factory assembled unit consists of a steel junction box, with removable side, connected to a .3 meter section of busway. The assembly includes connection lugs and a ground lug for wires 120 mm² or up to 300 mm² for standard size boxes and large size boxes.

The M40 models are for AC busway, while the M60 models are for DC busway. Nuisance tripping may be avoided using the current information to protect against overloading phases. The monitors also assist in the continuous challenge to balance the three phase loads. Once the meter is integrated, an automated email will be sent at 80% of full load as a warning to the user. This level may be changed in the field using the integrated webpage.



AC END FEED METER OPTIONS			
M41	WiFi, ≤415V Y, ≤240V Δ		
M43	No WiFi, ≤415V Y, ≤240V Δ		
M45	WiFi, 600V Y, 347V Δ		
M47	No WiFi, 600V Y, 347V Δ Y = wye, Δ = delta		
DC END FEED METER OPTIONS			
M61	Single Eth./WiFi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/- 190VDC)		
M63	Single Eth./No WiFi, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/- 190VDC)		
M67	Dual Eth., single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)		
M69	Dual Eth/Dual Modbus, single phase, 120VDC - 300VDC OR split phase 120VDC (+/-60VDC) to 380V(+/-190VDC)		
BOX/LUGS OPTION	1 Meter or Accessory	1 Meter & 1 Accessory (opposite lids)	1 Meter & 1 Accessory (same lid)
(S) Standard Box, Standard Lugs	X	X	
(L) Large Box, Standard Lugs	X	X	X
(R) Large Box, Bolt Lugs	X	X	X

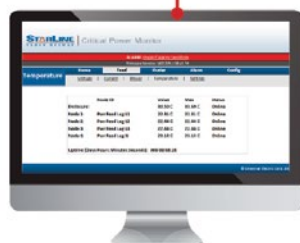
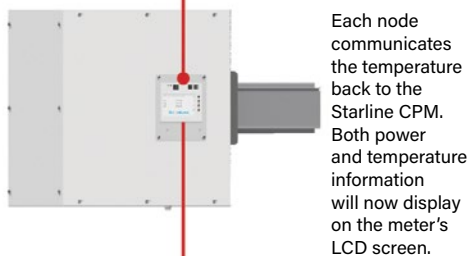
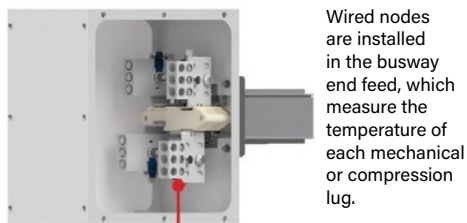
*The above arrows show how to determine your meter location on an end feed (Refer to option 9. Meter Location on **page 4.32** End Feed Units: Product Numbers)

400T5 SYSTEMS

END FEED UNITS: ACCESSORIES

■ TEMPERATURE MONITOR

Temperature sensor technology is now available with the Starline Critical Monitor (CPM) for End Feeds. This innovative technology is a first of its kind; making the monitoring and viewing of temperature data instantaneous.



Temperature data also automatically transfer to the CPM's integral webpage—placing timely data at the end users fingertips.

(Refer to option 17, M40 Options on [page 4.33](#) End Feed Units: Product Numbers)

■ ANGLED METER LID

The angled meter End Feed lid is an accessory that delivers the flexibility to change the viewing angle for Display Meters in an End Feed.

This enclosure allows for the meter to be mounted flush to the End Feed lid or presented in an extended position at 30° from vertical. This presents a more comfortable and easier viewing angle when looking up at an End Feed unit to read the LCD screen.



(Refer to option 10, Accessories Package on [page 4.32](#) End Feed Units: Product Numbers)

■ IR WINDOWS

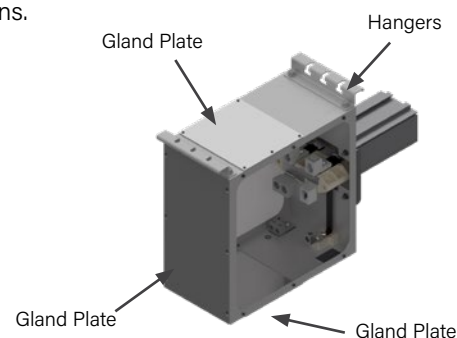
IR windows added to End Feeds offer:

- Enhanced electrical safety
- Reduced PPE
- Closed-door infrared inspections
- Stable and consistent transmission over product life
- Largest field of view of any IR window
- Supports visual and infrared imaging for any IR camera



■ 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. This option should also be chosen for seismic applications.



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
<div> <div>-</div> <div>M030</div> <div>C</div> <div>-</div> <div>STD</div> <div>0</div> <div>-</div> <div>M41</div> <div>S</div> <div>1</div> <div><i>*Optional</i></div> </div>											
		12. Straight Length	13. Busway Access	14. Paint Color		15. Tape Marking		*16. Meter Release	*17. M40 Options	*18. System Config. and CT Type	

1. System <i>(standard of measure)</i>	
G Global	M Metric
2. Product Type <i>(section component)</i>	
F End Feed	
3. Product Frame <i>(maximum amperage)</i>	
400 400 amps	
4. Compatibility <i>(frame compatibility)</i>	
T5 T5 Series	K5 T5 Series (Limiting Strip)
5. Material <i>(busbar material)</i>	
C Copper	
6. Neutral/Ground Busbar <i>(size of neutral busbar and/or ground)</i>	
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 <i>(orientation of section for mating purposes)</i>	
S Standard	R Reversed
8. Lug/Box Options <i>(standard/double/bolt lugs and box size)</i>	
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 <i>(from the terminal, side with removable lid)</i>	
R Right	L Left
N None (N/A)	
10. Accessories Package <i>(optional accessories for feed units)</i>	
S Standard	R IR Window - Rectangular
C IR Window - Circular	A Angled Meter Lid
T IR (rect.) + Angled Lid	L IR (circ.) + Angled Lid
F End Feed Hanger & Gland Plates	B (C+F)
E (T+F)	J (R+F)
K (A+F)	M (L+F)
11. Accessories Location <i>(from the terminal, side with accessory)</i>	
N None (N/A)	R Right
L Left	F Front (consult the factory)
12. Straight Length <i>(length of section)</i>	
M030 .3 meters	
13. Busway Access	
C Continuous	
14. Paint Color <i>(allows painting of the busway housing)</i>	
STD Factory Mill Finish	RED Paint Factory Red
BLK Paint Factory Black	BLU Paint Factory Blue
WHT Paint Factory White	**RAL <i>(please see page 4.80)</i>
<i>**Standard offering (STD) will be Factory Mill Finish for Metric (M) systems & Factory Silver Paint for Global (G) systems</i>	
15. Tape Marking <i>(colored tape on both sides of busway housing)</i>	
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	

GF400T5C4R-LRLL-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, Circular IR Window + Angled Meter Lid, Left Accessory Location, 3 meter Straight Length, Continuous Busway Access, Painted Factory Black, No Tape Marking

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 every 3 meters maximum.

Part Number
 WMBT5-9



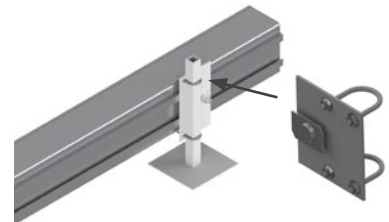
T5 SERIES

ACCESSORIES: SUPPORT HARDWARE

■ RAISED MOUNTING BRACKET

For mounting the busway horizontally (with access slot facing to the side) for under floor applications.

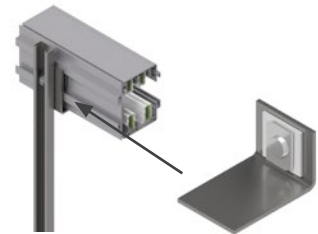
Part Number
250, 400, 630 & 800 amp
systems only:
MRFBT5-2
Available in plain zinc
or black (-BLK)
Weight
.09 kg



■ 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*

Part Numbers
(for 250 amp global & metric systems):
GRM250T5-1 MRM250T5-1

(for 400 amp global & metric systems):
GRM400T5-1 MRM400T5-1

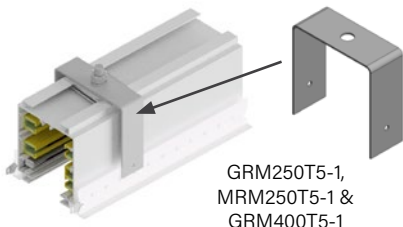
(for 630 amp global & metric systems):
GRM630T5-1 MRM630T5-1

(for 800 amp systems):
SRM800T5-1

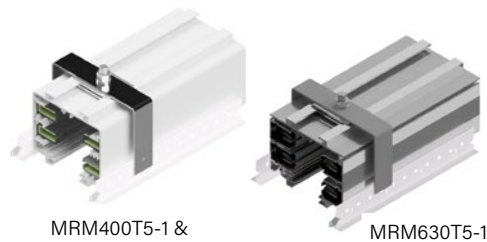
(for 1000 amp systems):
GRM1K025-1 MRM1K025-1

(for 1250 amp systems):
SRM1K2T5-1

Available in plain zinc
or black (-BLK)

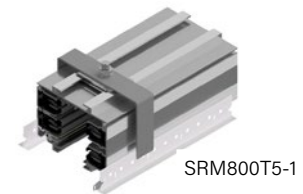


GRM250T5-1,
MRM250T5-1 &
GRM400T5-1

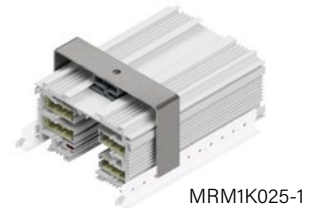


MRM400T5-1 &
GRM630T5-1

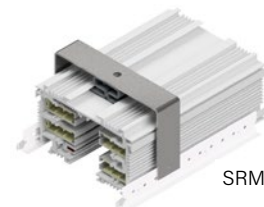
MRM630T5-1



SRM800T5-1



MRM1K025-1



SRM1K2T5-1

T5 SERIES

ACCESSORIES: SUPPORT HARDWARE

PRODUCT DESCRIPTION

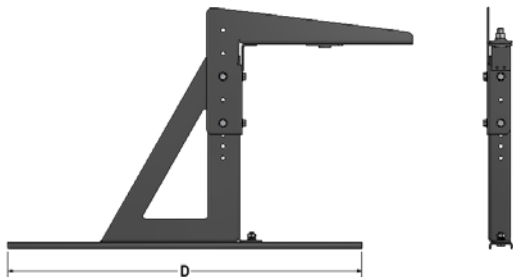
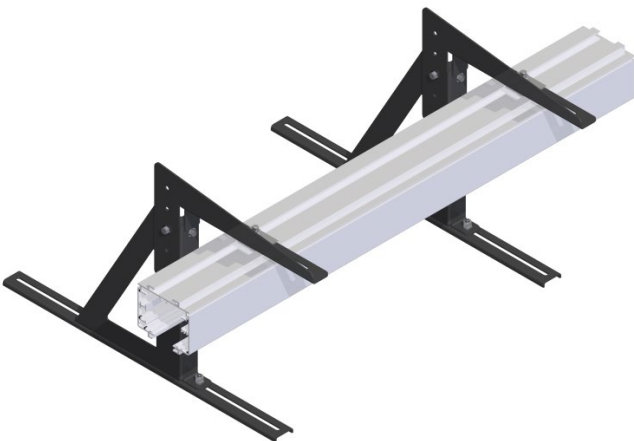
UNIVERSAL SERVER CABINET MOUNTING BRACKETS

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*

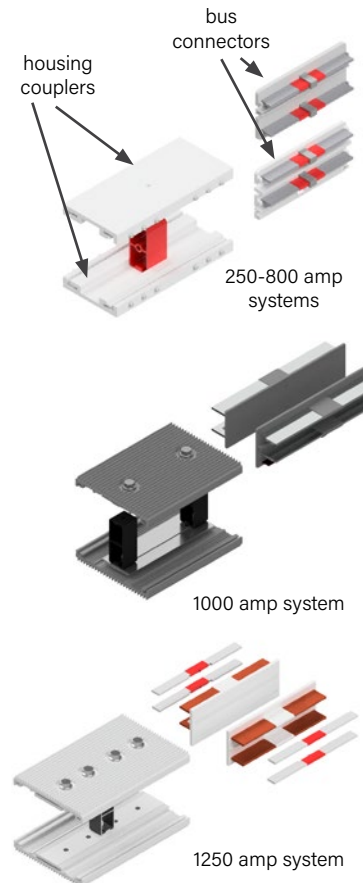
Part Numbers	
<i>(for 250 amp global & metric systems):</i>	
GJK250T5-1	MJK250T5-1
GJK250T5G-1	MJK250T5G-1
GJK250T5N-1	MJK250T5N-1
GJK250T5F-1	MJK250T5F-1

<i>(for 400 & 630 amp global & metric systems)</i>	
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

<i>(for 1000 amp systems)</i>	
GJK1K0T5-1	MJK1K0T5-1
GJK1K0T5G-1	MJK1K0T5G-1

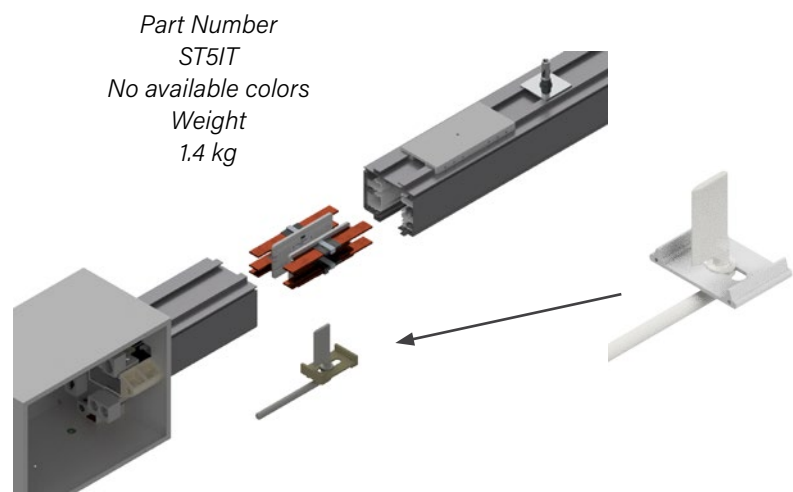
<i>(for 1250 amp systems)</i>	
MJK1K2T5-1	
MJK1K2T5G-1	



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.

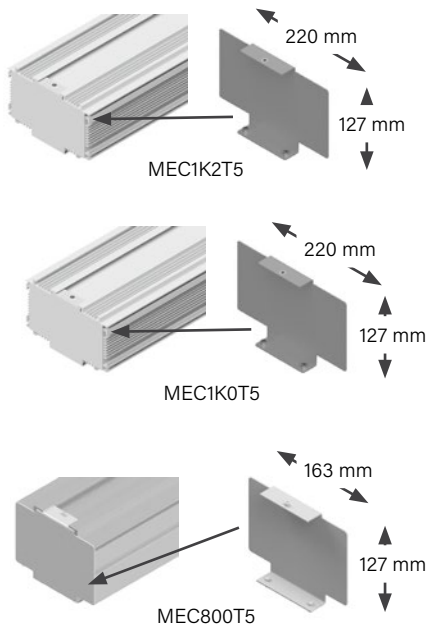


T5 SERIES

ACCESSORIES: CONNECTION HARDWARE

■ END CAP

For covering the end of T5 busway systems.



Part Numbers
(for 250 amp global & metric systems):
GEC250T5 MEC250T5

(for 400 amp global & metric systems):
GEC400T5 MEC400T5

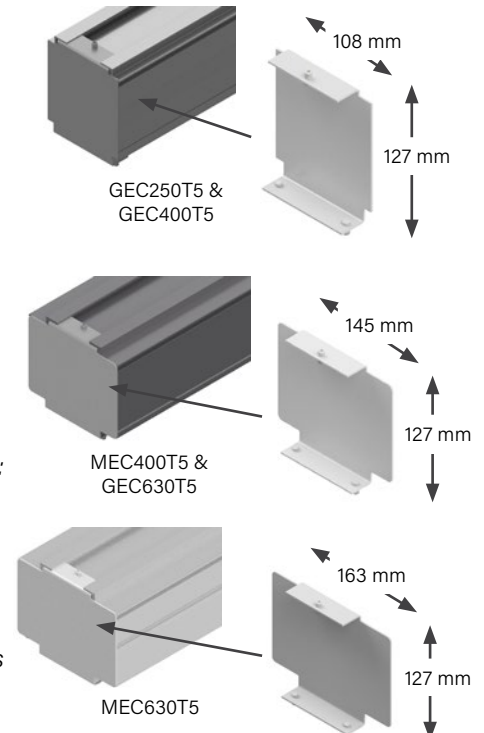
(for 630 amp global & metric systems):
GEC630T5 MEC630T5

(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



■ 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

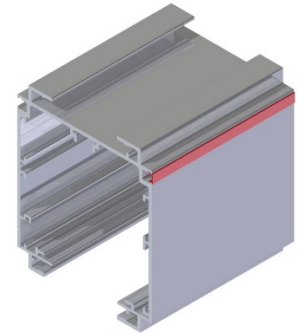
■ DATA CHANNEL COVER

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)



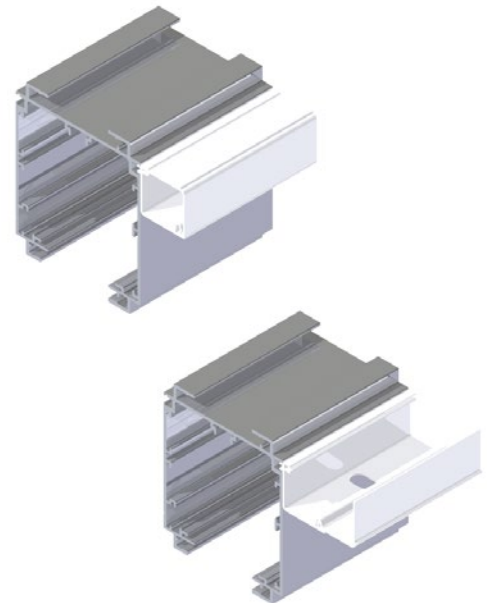
■ HINGED WIRE WAY

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



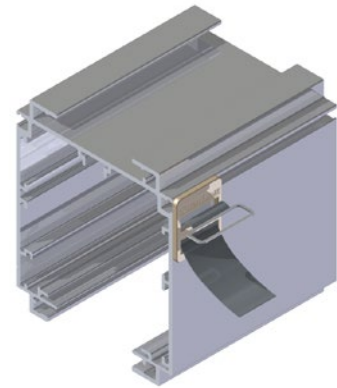
T5 SERIES

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.

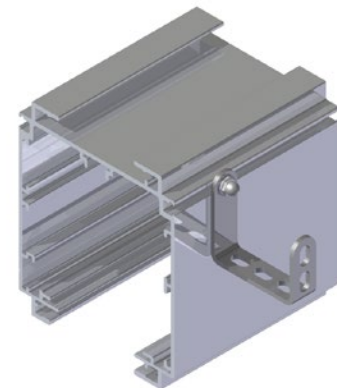
*Part Number
SVCST5-12
Available in gray, with a black
colored strap only*



■ 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)*



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.

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