



# MULTI-BEAM XLE POWER CONNECTORS

TE Connectivity's (TE) MULTI-BEAM XLE connectors feature a 3-beam contact, made from a thicker (higher) conductivity material than the original single-beam or 4-beam rectangular power connector designs. The 3-beam design allows for a greater angular mis-alignment between mating connectors and offers a lower mating force.

In addition, MULTI-BEAM XLE connectors offer a slimmer housing design that reduces the overall PCB footprint and has the option of using a low power contact—the industry proven Universal Power Module (UPM) contact. The new contact and housing design allows more power in the same footprint—over 40% more current in the same space. MULTI-BEAM XLE connectors are as modular as original MULTI-BEAM XL connectors in that they can be designed to fit specific customer needs. MULTI-BEAM XLE connectors are also available as pre-assembled cable assemblies.

## Applications

- Modular hot-swappable power supplies
- 1U / 2U servers
- High-end computer & telecommunications equipment
- Power distribution circuit boards
- Power distribution cable assemblies

# MULTI-BEAM XLE Power Connectors

## Electrical

- Current carrying capacity:
  - 80 Amp high power contact
  - 20 Amp low power contact (occupies 50% PCB space than MULTI-BEAM XL power contact)
- Contact resistance: 0.7 milliohm per contact at rated current

## Mechanical

- Mis-alignment / gatherability: +/- 2mm radial misalignment
- Mating Force:
  - High Power: 5N max. per contact
  - Low Power: 2N max. per contact
  - Signal: 1.7N max. per contact

## Product Dimensions

- Overall housing envelope dimensions similar to MULTI-BEAM XL connectors
- Length expandable depending on number of contacts
- Depth: 0.930" [23.6mm]
- Height at mating face: 0.574" [14.6mm]

## Contact Spacing

- High power:
  - 0.300" [7.62mm] - up to 300 VAC
  - 0.250" [6.35mm] - up to 150 VDC
  - 0.200" [5.08mm] - for connection to same voltage
- Low power: 0.115" [2.92mm] - up to 300 VDC applications (in groups of 2 contacts)
- Signal: 0.100" [2.54mm] grid

## Application Tooling

- Right angle plugs: Flat-rock seating tools (no unique tools required)
- Right angle receptacles: Flat-rock seating tools (no unique tools required)
- Vertical plugs: Contact TE for required seating tools
- Vertical receptacles: Flat-rock seating tools (no unique tools required)



## Features

- Two hot-pluggable power contacts to choose from:
  - 80 Amp high power contact
  - 20 Amp low power contact
- Over 40% lower mating force than original MULTI-BEAM XL connectors
- Over 40% more current in the same overall PCB space
- Low-wear contact design passes Telcordia environmental exposure requirements
- New design allows more angular mis-alignment

## Material

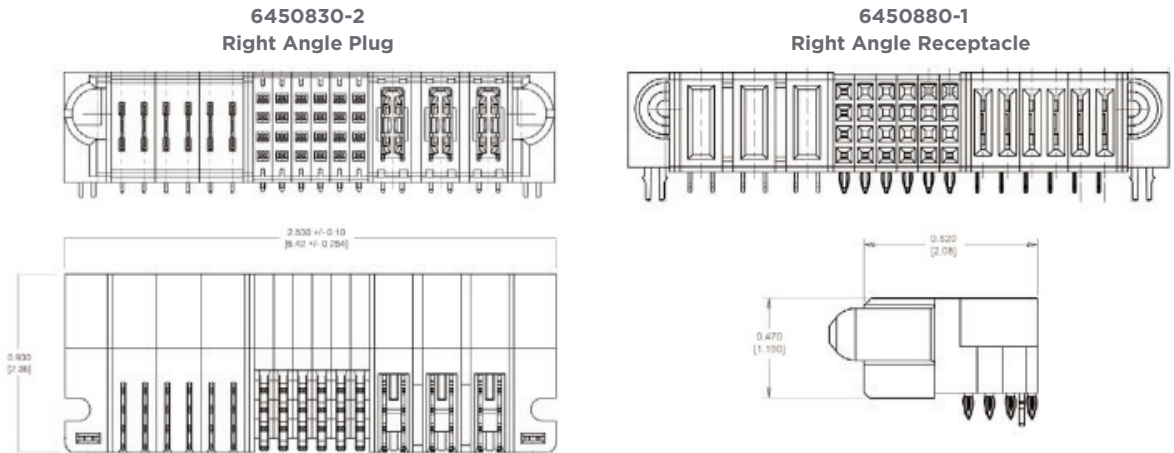
All materials meet RoHS requirements.

## Technical Documents

- Product Specification: 108-2292
- Application Specification: 114-13036

# MULTI-BEAM XLE Power Connectors

## Part Numbers



Available Configurations	Base Part Numbers		Overall Length of Plug	Mating Base Part Numbers	
	Right Angle Plugs	Vertical Plugs		Right Angle Receptacles	Vertical Receptacles
1P/24S/1P	--	6450820	1.1715" [43.56mm]	6450870	--
2LP/8S/2LP 6LP/24S/3P 2P/32S/2LP 2P/24S/2P	6450830	--	1.175" [29.84mm]	--	6450860
			2.555" [64.89mm]	6450880	6450850
			2.020" [51.30mm] 2.040" [51.81mm]	6450870	--
32S/4LP	6450831	--	1.750" [44.45mm]	6450871	--
12P/48S/8LP 4ACP/48S/12HDP	6450840	--	5.600" [142.24mm] 5.390" [136.90mm]	6450880	6450860
4ACP/48S/12HDP	--	6450810			
20S/6P	2343044	2343044	2.415" [61.314mm]	2343054*	--

\*New MULTI-BEAM XLE 80A connector

## Configuration Descriptions

ACP	P	LP	S
.300" [7.62mm] spacing	0.250" [6.35mm] spacing	0.150" [3.81mm] spacing	0.100" [2.54mm] spacing
300 Volts	200 Volts	200 Volts	60 Volts

ACP indicates the high power contact on 300 VAC spacing.

P indicates the high power contact on 200 VDC spacing.

LP indicates the low power contact on 200 VDC spacing.

S indicates the signal contact on 200 VDC spacing.

### TE Technical Support Center

USA:	1.800.522.6752
Canada:	1.905.475.6222
Mexico:	52.0.55.1106.0800
Latin/S. America:	54.0.11.4733.2200
Germany:	49.0.6251.133.1999
UK:	44.0.800.267666
France:	33.0.1.3420.8686
Netherlands:	31.0.73.6246.999
China:	86.0.400.820.6015

### te.com

MULTI-BEAM XL, TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks owned or licensed by the TE Connectivity family of companies.

All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2020 TE Connectivity Ltd. family of companies All Rights Reserved.

2-1773449-4 DND 01/20