

# EXTreme LPHPower Connectors >

Designed with power blades parallel to the PC board, EXTreme Low Profile Hybrid (LPH) Connectors are a mixed, high-current power and signal connector system that picks up where traditional connectors leave off. The recent addition of the 2 power RA receptacles/plugs to the LPH family allows customers to explore further configurations in the LPH family.

## ADVANTAGES AND FEATURES

### Enables customers to explore further configurations in the LPH family

The two circuit addition of the EXTreme LPH Connectors allows customers to suit their needs more accurately as it provides extra space-savings and more cost for irrelevant benefit.

### Enhances system airflow and provides 127.0A per linear inch

The EXTreme LPH Connectors have a low-profile design that enhances system airflow with power contacts that are parallel to the PC board, permitting an overall connector height of 7.50mm.

### Meets system power requirements

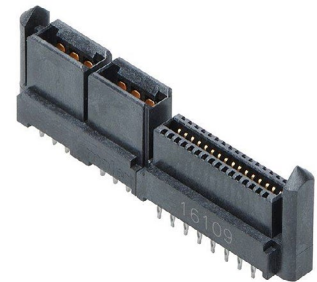
LPH receptacles mate to either LPH plug or industry standard 1.57mm card edge providing greater flexibility in multiple industries and applications.

### Allows power and return signals in the same bay for a total of 60.0A per power bay

The hybrid power/signal design solution with two isolated power contacts per housing bay (top and bottom) allows power and return in the same bay to accommodate common DC power requirements.

### Reduces the potential for stubbing or damage

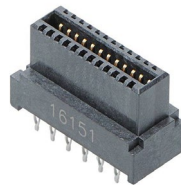
The rugged signal and power contacts of the Hybrid Vertical Receptacle of EXTreme LPH Connectors help prevent damage.



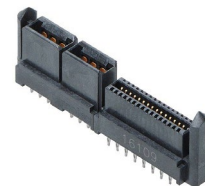
Hybrid Vertical Receptacle



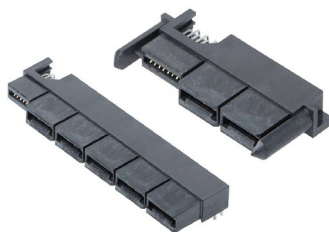
Power-Only Vertical Receptacle



Signal-Only Vertical Receptacle



Hybrid Vertical Receptacle



Hybrid Right-Angle Receptacles



Hybrid Right-Angle Plugs

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## MARKETS AND APPLICATIONS

### Power for Data Center

1U rack box  
Backplanes  
Power supplies  
Routers and switches  
Servers

### Industrial Automation

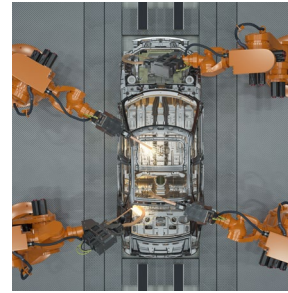
Industrial controls

### Telecommunications

Test equipment  
Workstations



*Servers*



*Industrial controls*



*Workstations*

## SPECIFICATIONS

### Reference Information

Packaging: Tray or tube  
UL File No.: E29179  
CSA File No.: LR19980  
Designed In: Millimeters  
EU RoHS Compliant: Yes  
Halogen: Low halogen  
Glow Wire Compliant: No

### Mechanical

Mating Force (max. per circuit):  
Power Contacts – 6.87N (1.54 lb.)  
Signal Contacts – 1.08N (0.24 lb.)  
Un-mating Force (min per circuit):  
Power Contacts – 1.47N (0.33 lb.)  
Signal Contacts – 0.15N (0.03 lb.)  
Durability: 250 cycles (receptacle and plug)

### Electrical

Voltage: 250V max.  
Current (at 30°C temperature rise):  
Power: 30.0A max.  
Signal: 1.0A max.  
Contact Resistance (per contact):

	Min	Max
Power (milliohms)	-0.11	0.02
Signal (milliohms)	0.35	0.47

Dielectric Withstanding Voltage: 1,500V  
Insulation Resistance (Min.): 5,000 Megohms  
Current interruption:  
Power – 30.0A and 48V DC  
Signal – 1.0A at 30V

### Physical

Housing: LCP  
Contact:  
Power Contacts - Copper (Cu) alloy  
Signal Contacts - Copper (Cu) Alloy  
Plating:  
Contact Area — Select Gold  
Solder Tail Area — Tin  
Underplating — Nickel  
Flammability Rating: UL 94V-0  
Operating Temperature: -40 to +105°C

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