

Minitek® Pwr PICPWR OCP® Connector System

OCP® M-PIC CONNECTOR

Amphenol introduces the new PICPWR OCP® connector system.

12VPICPWR auxiliary power connector and cable assembly supports the 864 W (2x6) / 486 W (2x3) power distribution within the HPM and to/from peripheral subsystems to HPM or peripheral subsystems.

****48VPICPWR** OCP® 2x6+12SB or 2x3+6SB auxiliary power connector and cable assembly supports the 3312 W (2x6) / 1863 W (2x3) used in a variety of system architectures utilizing a 48 V busbar, 48 VHPMs/PDBs, and 48 V peripherals.

M-PIC connectors provide the Hybrid (Power/Signal) solution to meet various server system architectures, including Open Compute Project (OCP®) Open Rack v3 & Modular Hardware Systems (DC- MHS).

- Rated current up to 12 A for 2X6+12SB and 13.5 A for 2X3+6SB with all power contacts
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation



FEATURES

- High current alloy material used for contacts
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- High retention force in housing
- UL 94 V-0 flammability rated Nylon material
- RoHS compliant and lead-free

BENEFITS

- Rated up to 12 A (2x6) / 13.5 A (2x3) per contact with all contacts loaded
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismating
- Well secured terminals in housing
- High flammability rating
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP, Black (UL 94 V-0)
- Signal Terminal: Copper Alloy with Nickel under plate and Gold plating
- Power Terminal: Copper Alloy with Nickel under plate and Gold plating

MECHANICAL PERFORMANCE – WT B CONNECTORS

- Insertion Force PWR: 5.6 N max.
- Insertion Force Side Band: Insertion force: 3.0 N max.
- Withdrawal Force PWR: 1.5 N min.
- Withdrawal Force Side Band: 0.2 N max.
- Durability: 30 mating cycles
- Wire Pullout Force: Refer to product specifications

MECHANICAL PERFORMANCE – BT B CONNECTORS

- Insertion Force: 35 N max.
- Withdrawal Force: 8 N min.
- Durability: 30 mating cycles

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance:
 - PWR: 5 mΩ max.
 - Side Band: 10 mΩ max.
- Insulation Resistance: 1000 MΩ min.
- Voltage Rating PWR: 600 V AC/V DC
- Voltage Rating Signal: 100 V AC/V DC
- Current Rating: 12 A (2x6) / 13.5 A (2x3)
- Dielectric Withstand Voltage: 2200 V AC
- Temperature Rise: 30 °C max.

PACKAGING

- PCB Header: Tray, Tape & Reel
- Cable Housing: Bulk
- Terminal: Reel

SPECIFICATION

- Amphenol Product Specification: GS-12-1766
- Amphenol Application Specification: GS-20-0807
- Amphenol Packaging Specification: GS-14-3016
- Product Drawing: Please refer to the below table

ENVIRONMENTAL

- Operating Temperature Range: -40 °C to +105 °C
 - *Includes 30 °C terminal temperature rise at rated current

TARGET MARKETS/APPLICATIONS



AI and Cloud
Gaming Consoles
Graphic Interface
Networking



Computing System
Server and storage

PART NUMBERS

Find part number details using the search box on www.amphenol-cs.com

Type	Description	Product Series	Drawing Number
Dual Row Board Headers	PICPWR OCP® Right-Angle header	10167519	10167519
	PICPWR OCP® Vertical Header	10167520	10167520
	**48PICPWR OCP® Right-Angle header	TBC	TBC
	**48PICPWR OCP® Vertical Header	TBC	TBC
Dual Row Board Receptacle	PICPWR OCP® Right-Angle Board Receptacle With Latch	10171570	10171570
	PICPWR OCP® Right-Angle Board Receptacle Without Latch	10169259	10169259
Dual Row Cable Housings	Receptacle Housing	10167523	10167523
Terminals	Receptacle Terminal(PWR)-16 AWG	10167522	10167522
	Receptacle Terminal(PWR)-14 AWG	10174057	10174057
	Receptacle Terminal (Signal)	10167521	10167521

** Part under development

*Amphenol supports PICPWR OCP® Pigtails and Cable assemblies on request



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