

Minitek® Pwr PICPWR OCP® Connector System

OCP M-PIC CONNECTOR

Amphenol introduces the new PICPWR OCP® connector system. This new introduction PICPWR 2x6+12SB or 2x3+6SB auxiliary power connector and cable assembly supports the 864W (2x6) / 486W (2x3) power distribution within the HPM and to/from peripheral subsystems to HPM or peripheral subsystems. 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 12A for 2X6+12SB and 13.5A 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
- UL94V-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 mismatching
- Well secured terminals in housing
- High flammability rating
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP, Black (UL94V-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- WTB CONNECTORS

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

MECHANICAL PERFORMANCE- BTB CONNECTORS

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

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance:
 - PWR: 5mΩ max.
 - Side Band: 10mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating PWR: 600VAC/VDC
- Voltage Rating Signal: 100VAC/VDC
- Current Rating: 12A (2x6) / 13.5A (2x3)
- Dielectric Withstand Voltage: 2200VAC
- 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

| Type | Description | Product Series | Drawing Number |
|---------------------------|---|----------------|----------------|
| Dual Row Board Headers | PICPWR OCP® Right Angle header | 10167519 | 10167519 |
| | PICPWR OCP® Vertical Header | 10167520 | 10167520 |
| Dual Row Board Receptacle | PICPWR OCP® Right Angle Board Receptacle with Latch | 10171570 | 10171570 |
| | PICPWR OCP® Right Angle Board Receptacle With out Latch | 10169259 | 10169259 |
| Dual Row cable housings | Receptacle Housing | 10167523 | 10167523 |
| Terminals | Receptacle Terminal(Pwr)-16AWG | 10167522 | 10167522 |
| | Receptacle Terminal(Pwr)-14AWG | 10174057 | 10174057 |
| | Receptacle Terminal (Signal) | 10167521 | 10167521 |

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

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



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