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).



TARGET MARKETS

- 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	BENEFITS
▪ High current alloy material used for contacts	▪ Rated up to 12 A (2x6) / 13.5 A (2x3) per contact with all contacts loaded
▪ Fully isolated terminals	▪ Prevents terminals from potential damage during operation
▪ Positive locking on housing with low thumb latch operation	▪ Ensures secured mating retention
▪ Fully polarized housings	▪ Prevents accidental mismating
▪ High retention force in housing	▪ Well secured terminals in housing
▪ UL 94 V–0 flammability rated Nylon material	▪ High flammability rating
▪ RoHS compliant and lead–free	▪ 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 – WTB 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 – BTB 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

Disclaimer
Please note that the above information is subject to change without notice.

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



EXPLORE THE PRODUCT DETAILS ONLINE
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