

Minitek® Pwr 4.2 High Current Connector System

Dual Row & Single Row

ROBUST, VERSATILE AND HIGH CURRENT PERFORMANCE

Minitek® Pwr 4.2 High Current Connector (HCC) is designed for power applications with current rating up to 13.5A per contact and wire gauge range from 20 to 16AWG for Wire-to-Wire and Wire-to-Board applications. It is available in 2 to 24 circuits for dual row and 3 to 5 circuits for single row.

- Rated current up to 13.5A per contact
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Patented right angle receptacle housing



TARGET MARKETS



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
- Interchangeable hand crimping and terminal extraction tools
- Patented right angle receptacle housing
- Post-plated terminal
- Glow wire compliant option
- UL94V-0 flammability rated nylon material
- RoHS compliant and lead-free

BENEFITS

- Rated up to 13.5A per contact
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismatching
- Well secured terminals in housing
- New crimping tools are not required
- Ideal for cable routing within 1U or 2U equipment
- Prevents environmental corrosion such as salt spray and gas corrosion
- Complies with International Standard IEC 60335-1 for household appliances
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Board Connector: High Current Alloy with optional Tin and Gold Flash plating
- Housing: Nylon 66, Natural & Black, UL94V-0
- Crimping Terminal: High Current Alloy with optional Tin and Gold Flash plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 14.7N max
- Terminal Withdrawal Force: 1N min.
- Durability: 30 mating cycles
- Wire Pullout Force: Refer to product specifications

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 10mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 600Vrms
- Current Rating: Up to 13.5A/contact
- Dielectric Withstand Voltage: 1500VAC
- Temperature Rise: 30°C max

PACKAGING

- PCB Header: Tray
- Crimping Housing: Bag
- Terminal: Reel

APPROVALS & CERTIFICATION

- Glow Wire Ignition Temperature (GWIT) per IEC 60695-2-13
- Glow Wire Flammability Index (GWFI) per IEC 60695-2-12

SPECIFICATION

- Amphenol Product Specification: GS-12-1333 and GS-12-1377
- Amphenol Application Specification: GS-20-0401
- Amphenol Packaging Specification: GS-14-2362

ENVIRONMENTAL

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

TOOLING INFORMATION

- Ratchet Hand Crimping Tool: 10129483-001LF
- Terminal Extraction Tool: 10129274-042LF

TARGET MARKETS/APPLICATIONS



1U Rack Box
Customer Premises Equipment
Generic Telecom Box
Interface Converter
WiMax Box



Air Conditioner
Microwave Oven
Refrigerator
Set Top Box



Blade Server
Desktop PC and Motherboard
HDD Application
Rack-Mount Server
Server-Orthogonal Configuration



Defibrillator
Hospital Bed
Patient Monitor
Ultrasound Equipment



Chemical Detection System
Radar Equipment

PART NUMBERS

Type	Description	Part Numbers
Dual Row	Right angle PCB header	10131318
	Vertical PCB header	10131319
	Receptacle housing	10127815
	Header housing	10144559
	Panel mount header housing	10127816
	Right angle receptacle housing with cover	10122956
Single Row	Right angle PCB header	10137784
	Vertical PCB header	10137785
	Receptacle housing	10136644
	Panel mount header housing	10136645
Applicable for both types	Receptacle terminal (post-plated solution)	10136289
	Receptacle terminal (pre-plated solution)	10134170
	Header terminal	10136290