

# Minitek® Pwr 4.2 Connector System

## **Dual Row & Single Row**

# COMPACT, ROBUST AND VERSATILE

Minitek® Pwr 4.2mm is a flexible and comprehensive solution designed for power application with current rating up to 9A per circuit. It is available in 2 to 24 circuits for dual row and 3 to 5 circuits for single row.

- Solutions for Wire-to-Board, Wire-to-Wire and Wire-to-Panel applications
- Scoop proof housing prevents terminals from damage
- Polarized mating geometry to prevent mismatching
- Fully isolated terminal stop prevent terminals from damage
- Blind mating interface (BMI) option in vertical, through hole type for dual row. 14 positions available



#### **FEATURES**

- Low insertion force for installation of crimped terminal
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- Scoop-proof housings
- High retention force in housing
- Glow wire compliant option
- BMI option
- UL94V-0 flammability rated nylon material
- Patented right angle type receptacle
- RoHS compliant and lead-free

#### **BENEFITS**

- Easy to use
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismating
- Ensures terminals and header pins are not damaged for angled mating
- Well secured terminals in housing
- Complies with International Standard IEC 60335-1 for household appliances
- Allows ± 2.54mm gatherability for blind mating
- High flammability rating
- Ideal for cable routing within 1U or 2U equipment systems
- Meets environmental, health and safety requirements

### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Board Connector: Brass with optional Tin and Gold Flash plating
- Housing: Nylon 66 & LCP, Natural & Black, UL94V-0
- Crimping Terminal: Brass/Phosphorus Bronze 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:  $10m\Omega$  max.
- Insulation Resistance:  $1000M\Omega$  min.
- Voltage Rating: 600Vrms
- Current Rating: Up to 9A/contact
- Dielectric Withstand Voltage: 1500VAC
- Temperature Rise: 30°C max

#### **PACKAGING**

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

#### **APPROVALS & CERTIFICATION**

- Dual Row: UL E66906 & E467317
- Single Row: UL pending
- 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-12-1181 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

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## **PART NUMBERS**

Туре	Description	Part Numbers
Dual Row	Right angle PCB header, through hole	10127819
	Vertical PCB header, through hole	10127820
	Right angle receptacle housing with cover	10122956
	Receptacle housing	10127815
	Header housing	10144559
	Panel mount header housing	10127816
	Vertical PCB header, through hole (BMI)	10138978
Single Row	Right angle PCB header, through hole	10136646
	Vertical PCB header, through hole	10136647
	Receptacle housing	10136644
	Panel mount header housing	10136645
Applicable for both types	Receptacle terminal (post-plated solution)	10127817
	Receptacle terminal (pre-plated solution)	10134170
	Header terminal	10127818