

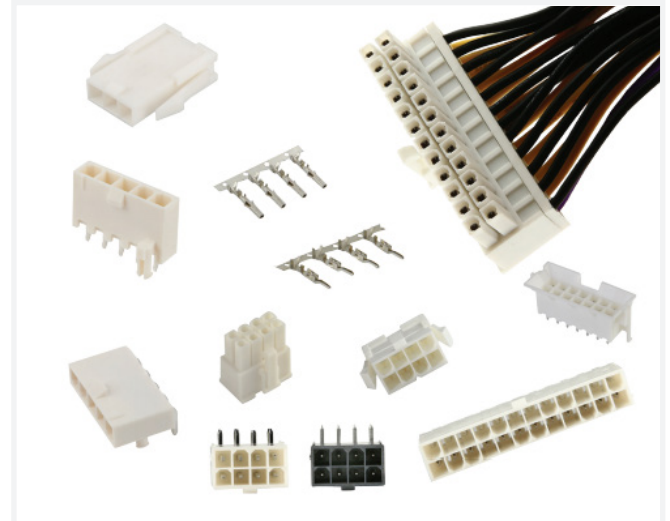
# Minitek® Pwr 4.2 Connector System

## 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.



#### TARGET MARKETS



#### 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  $\pm 2.54$ mm 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

- Header: Copper Alloy with optional Tin and Gold platings
- Housing: Nylon 66 & LCP, Natural & Black, UL94V-0
- Crimping Terminal: Copper Alloy with optional Tin and Gold platings

### MECHANICAL PERFORMANCE

- Insertion Force: 14.7N max.
- 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 9A/contact
- Dielectric Withstand Voltage: 2200VAC
- Temperature Rise: 30°C max.

### PACKAGING

- PCB Header: Tray
- Cable 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

## PART NUMBERS

Type	Description	Part Numbers
Dual Row	Right Angle Receptacle Housing	10122956
	Vertical Receptacle Housing	10127815
	Plug Housing with ears	10127816
	Right Angle Through Hole Header	10127819
	Vertical Through Hole Header	10127820
	Vertical BMI Through Hole Header	10138978
	Plug Housing without ears	10144559
	PCIe AUX Receptacle Housing	10147577
	PCIe AUX Vertical Through Hole Header	10147579
	PCIe AUX Right Angle Through Hole Header	10147580
Single Row	Vertical Receptacle Housing	10136644
	Plug Housing	10136645
	Right Angle Through Hole Header	10136646
	Vertical Through Hole Header	10136647
Terminals	Receptacle Terminal with lube	10127817
	Plug Terminal	10156852/10127818
	Receptacle Standard Terminal	10134170
	Receptacle Terminals for PCIe AUX	10147578

## TOOLING INFORMATION

Terminal Part Number	AWG Range	Semi-Auto Crimping Machine	Fully-Auto Pneumatic Crimping Applicator	Fully-Auto Mechanical Crimping Applicator
10127818-XX2XLF	24AWG 26AWG 28AWG	10157894-001	10158621-001	10158622-001
10134170-X230LF	22AWG 24AWG 26AWG 28AWG	10157894-002	10158621-002	10158622-002
10127817-XX2XLF	24AWG 26AWG 28AWG	10157894-003	10158621-003	10158622-003
10134170-X220LF	18AWG 20AWG 22AWG 24AWG	10157894-004	10158621-004	10158622-004
10127817-XX1XLF	18AWG 20AWG 22AWG	10157894-005	10158621-005	10158622-005
10134170-X210LF	16AWG	10157894-006	10158621-006	10158622-006
10127818-XX1XLF	18AWG 20AWG 22AWG	10157894-007	10158621-007	10158622-007

HAND CRIMP TOOLS

Terminal Part Number	AWG Range	Hand Crimp Tool Part Number
10134170-X210LF	16AWG	10159388-001
10127817-XX1XLF 10127818-XX1XLF	18AWG 20AWG 22AWG	10159388-002
10127817-XX2XLF 10127818-XX2XLF	24AWG 26AWG 28AWG	10159388-003
10134170-X230LF	22AWG 24AWG 26AWG 28AWG	10159388-004
10134170-X220LF	18AWG 20AWG 22AWG 24AWG	10159388-005

TERMINAL EXTRACTION TOOL- 10129274-042LF

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