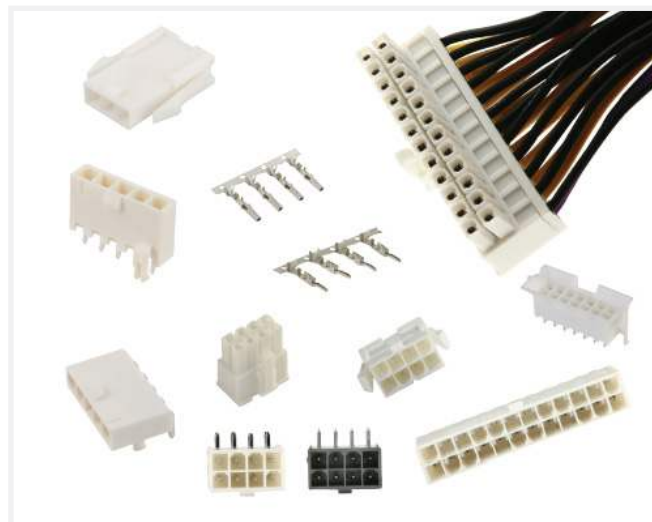# Minitek® Pwr 4.2 Connector System

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 ± 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

▪ 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

▪ 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: 9.0A max.

▪ Dielectric Withstand Voltage: 1500V AC

▪ Temperature Rise: 30°C max.

PACKAGING

▪ PCB Header: Tray/Tape and Reel

▪ 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–12–1533

▪ 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

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

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TOOLING INFORMATION

APPLICATORS

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

HAND CRIMP TOOLS

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

TERMINAL EXTRACTION TOOL- 10129274-042LF