

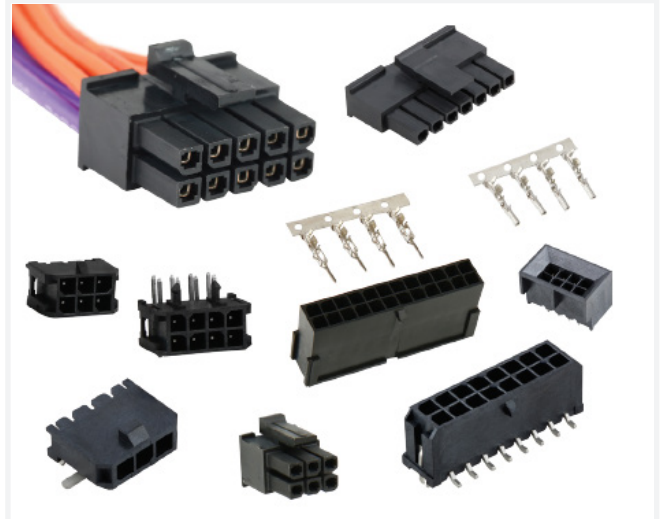
Minitek® Pwr 3.0 Connector System

Dual Row & Single Row

COMPACT, ROBUST AND VERSATILE

Minitek® Pwr 3.0 is a flexible and comprehensive solution designed for power application with current rating up to 5 A per circuit. It is available in 2 to 24 circuits for dual row and 2 to 12 circuits for single row.

- Solutions for Wire-to-Board and Wire-to-Wire applications
- Low insertion force for installation of crimped terminal makes it easy to use
- Polarized mating geometry prevents mismatching
- Fully isolated terminals prevents terminals from damage
- Blind mating interface (BMI) option in Vertical and Right angle 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
- UL 94 V-0 flammability rated LCP material
- RoHS compliant and lead-free

BENEFITS

- Easy to use
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismatching
- 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 ± 2.54 mm gatherability for blind mating
- High flammability rating
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Header: Copper Alloy with optional Tin and Gold platings
- Housing: LCP and Nylon, Black and Natural, UL 94 V-0
- Crimping Terminal: Copper Alloy with optional Tin and Gold plating

MECHANICAL PERFORMANCE

- 2 Terminals are used:
 - 10134160 – Insertion force 4.1 N (low insertion force) – Withdrawal force 0.6 N per circuit
 - 10127718 – Insertion force 8.0 N (high insertion force) – Withdrawal force 2.4 N per circuit
- Durability: 30 mating cycles
- Wire Pullout Force: Refer to product specifications

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 10 mΩ max.
- Insulation Resistance: 1000 MΩ min.
- Voltage Rating: 600 Vrms
- Current Rating: 8.5 A max. Refer to product specifications for per contact current ratings
- Dielectric Withstand Voltage: 2200 V AC
- Temperature Rise: 30 °C max.

PACKAGING

- PCB Header: Tray or Tape and Reel
- Receptacle 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-12-1177
- Amphenol Application Specification: GS-20-0399
- Amphenol Packaging Specification: GS-14-2359

ENVIRONMENTAL

- Operating Temperature Range: -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 | Receptacle Housing | 10127716 |
| | Plug Housing | 10127717 |
| | Right Angle Through Hole Header | 10127720 |
| | Vertical Through Hole Header | 10127721 |
| | Right Angle SMT Tails and Hold Down Header | 10137924 |
| | Right Angle SMT Tails and DIP Hold Down Header | 10137925 |
| | Vertical SMT Tails and Hold Down Header | 10137926 |
| | Vertical SMT Tails and DIP Hold Down Header | 10137927 |
| | Vertical BMI Through Hole Header | 10138980 |
| | Right Angle BMI Through Hole Header | 10144754 |
| | Vertical Through Hole Header with Metal Harpoon | 10158340 |
| | Right Angle Through Hole Header with Metallic Board Lock | 10161838 |
| | BMI Receptacle Housing | 10159684 |
| | BMI Plug Housing | 10160855 |
| | Vertical Press Fit Header | 10159685 |
| Single Row | Receptacle Housing | 10136653 |
| | Right Angle Through Hole Header | 10136654 |
| | Right Angle SMT Tails and DIP Board Lock Header | 10137867 |
| | Right Angle Through Hole Header with Board Lock | 10151857 |
| | Vertical Kinked Through Hole Header | 10157052 |
| | Vertical SMT Header | 10159410 |
| | Vertical SMT Header with Solder Tab | 10162511 |
| Terminals | Receptacle Terminal | 10134160/10127718 |
| | Plug Terminal | 10161703/10127719 |

TOOLING INFORMATION

APPLICATORS

| Terminal Part Number | AWG Range | Semi-Auto Crimping Machine | Fully-Auto Pneumatic Crimping Applicator | Fully-Auto Mechanical Crimping Applicator |
|------------------------------------|-----------|----------------------------|--|---|
| 10127719-00XXLF 10127718-00XXLF | 20 AWG | 10159974-001 | 10159975-001 | 10159976-001 |
| | 22 AWG | | | |
| | 24 AWG | | | |
| 10134160-X210LF | 16 AWG | 10159974-003 | 10159975-003 | 10159976-003 |
| | 18 AWG | | | |
| | 20 AWG | | | |
| 10134160-X220LF | 20 AWG | 10159974-004 | 10159975-004 | 10159976-004 |
| | 22 AWG | | | |
| | 24 AWG | | | |
| 10134160-X230LF | 26 AWG | 10159974-005 | 10159975-005 | 10159976-005 |
| | 28 AWG | | | |
| | 30 AWG | | | |

HAND CRIMP TOOLS

| Terminal Part Number | AWG Range | Hand Crimp Tool Part Number |
|------------------------------------|-----------|-----------------------------|
| 10127719-00XXLF 10127718-00XXLF | 20 AWG | 10159387-001 |
| | 22 AWG | |
| | 24 AWG | |
| 10134160-X210LF | 16 AWG | 10159387-003 |
| | 18 AWG | |
| | 20 AWG | |
| 10134160-X220LF | 20 AWG | 10159387-004 |
| | 22 AWG | |
| | 24 AWG | |
| 10134160-X230LF | 26 AWG | 10159387-005 |
| | 28 AWG | |
| | 30 AWG | |

TERMINAL EXTRACTION TOOL – 10129274-030LF

WHERE INNOVATION CONNECTS

Scan to learn more ▶



BCSMPWR300126A4