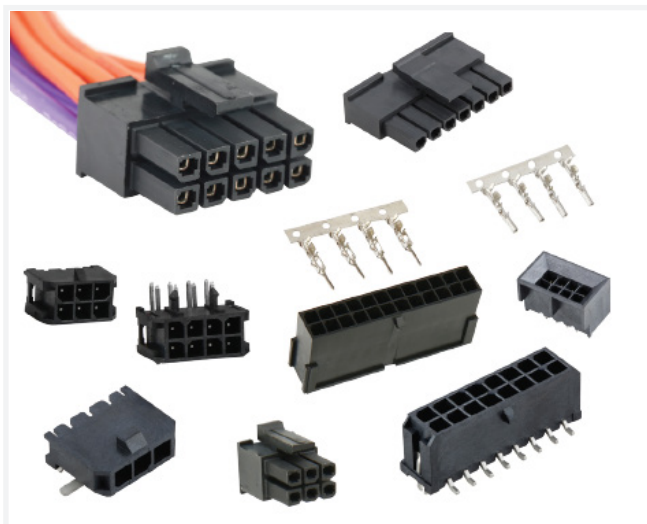# Minitek® Pwr 3.0 Connector System

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 5A 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, through hole type for dual row. 8, 12 and 14 positions available

TARGET MARKETS

FEATURES	BENEFITS
Low insertion force for installation of crimped terminal	Easy to use
Fully isolated terminals	Prevents terminals from potential damage during operation
Positive locking on housing with low thumb latch operation	Ensures secured mating retention
Fully polarized housings	Prevents accidental mismating
Scoop–proof housings	Ensures terminals and header pins are not damaged for angled mating
High retention force in housing	Well secured terminals in housing
Glow wire compliant option	Complies with International Standard IEC 60335–1 for household appliances
BMI option	Allows ± 2.54mm gatherability for blind mating
UL94V–0 flammability rated LCP material	High flammability rating
RoHS compliant and lead–free	Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Board Connector: Brass with optional Tin and Gold Flash plating
- Housing: LCP & Nylon, Black, UL94 V–0
- Crimping Terminal: Phosphorus Bronze with optional Tin and Gold Flash plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 4.5N max.
- Terminal Withdrawal Force: 2N min. before durability, 1.5N min. after durability
- Durability: 100 mating cycles
- Wire Pullout Force: Refer to product specifications

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 20mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 250Vrms
- Current Rating: 5A/contact. Refer to product specifications for higher current application
- Dielectric Withstand Voltage: 1000VAC
- 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–12–1177 and GS–12–1374
- Amphenol Application Specification: GS–20–0399
- Amphenol Packaging Specification: GS–14–2359

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: 10129274–030LF

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, through hole	10127720
	Vertical PCB header, through hole	10127721
	Receptacle housing	10127716
	Header housing	10127717
	Right angle PCB header, SMT	10137924
	Right angle PCB header, DIP boardlock	10137925
	Vertical PCB header, SMT	10137926
	Vertical PCB header, DIP boardlock	10137927
	Vertical PCB header, through hole (BMI)	10138980
Single Row	Right angle PCB header, through hole	10136654
	Right angle PCB header, SMT tail & hold down	10136655
	Vertical PCB Header, through hole	10136656
	Right angle PCB header, SMT tail & DIP boardlock	10137867
	Receptacle housing	10136653
Applicable for both types	Receptacle terminal (post-plated solution)	10127718
	Receptacle terminal (pre-plated solution)	10134160
	Header terminal	10127719

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