

# 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

- 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 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 ± 2.54mm gatherability for blind mating
- High flammability rating
- 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
- 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	10127718
	Header terminal	10127719