

## \*\*\* Please contact Gerhard.Strobl@codico.com to get more information! \*\*\*

Minitek Pwr<sup>™</sup> Hybrid 4.2

#### **OVERVIEW**

Minitek Pwr<sup>™</sup> Hybrid 4.2 connectors are designed for power and signal application with current rating up to 9A per circuit, available for dual row and 2 to 24 power circuits, and 2 to 12 signal for Wire-to-Board application.

Crimp, snap-in receptacle contacts are used to terminate AWG 16-30 wires. Receptacle housings allow Wire to-Board configurations. Crimping and removal tools are available for wire harness assembly. Board mounted vertical headers support Wire-to-Board interconnections. Wave soldering headers are available in through-hole configuration.



#### **FEATURES**

Separated power and signal contacts	<ul> <li>Provide power contacts for power distribution and signal contacts for power control</li> </ul>
Flexible modular design	<ul> <li>Number and placement of power and signal contacts are highly configurable for customer power needs</li> </ul>
Flexible design with signal pin	<ul> <li>Backward mateable with traditional 4.2mm power connector if signal pin is absent</li> </ul>
<ul> <li>Signal contact in 2mm pitch and power contact in 4.2mm pitch</li> </ul>	<ul> <li>Compact size design and clear identification for cable harness termination</li> </ul>
Power pin is separated by signal pin in center position	<ul> <li>Better heat dissipation, hence better current rating capability</li> </ul>
Enlarged active latch with low thumb latch operation	<ul> <li>Prevents unexpected unmating and provides secure locking mechanism</li> </ul>
• Signal pin with lower insertion and extraction force than power pin	<ul> <li>Relatively easy to mate and un-mate compared to the similarly configured traditional 4.2mm power connector</li> </ul>
High retention force for terminal within housing	Well secures terminal in housings
Available in UL94V-0 flammability rated LCP	High flammability rating
RoHS compliance and Lead free	Meet environmental, health and safety requirements

**BENEFITS** 



## **TECHNICAL INFORMATION**

#### MATERIALS

- Power Contact for Board Header: Brass with Tin, optional Au and GXT<sup>™</sup> plating
- Signal Contacts for Header and Receptacle: Phosphorus with optional Au and GXT<sup>™</sup> plating
- Power Terminal for Crimping: Brass/Phosphorus with Tin, optional Au and GXT™ plating
- Housing: Nylon 66, UL94V-0

#### **ELECTRICAL PERFORMANCES**

- Low Lever Contact Resistance:  $10m\Omega$  max.
- Insulation Resistance: 1000M $\Omega$  min.
- Voltage Rating for Power Contacts: 600Vrms
- Current Rating for Power Contacts: Up to 9A/contact
- Current Rating for Signal Contacts: Up to 1A/contact
- Dielectric Withstand Voltage for Power: 1500 VAC
- Dielectric Withstand Voltage for Signal: 1000 VAC
- Temperature Rise: 30°C max.

#### **ENVIRONMENTAL**

- Operating Temperature: -40°C to +105°C
- Include 30°C terminal temperature rise at rated current

#### **MECHANICAL PERFORMANCE**

- Terminal Insertion Force: 14.7N max.
- Terminal Withdrawal Force: 0.5N min.
- Durability: 30 cycles

#### SPECIFICATIONS

- Product Specification: GS-12-XXXX\*
- Package Specification: GS-14-XXXX\*
- Application Specification: GS-20-XXXX\*
- \* Please contact product manager for more information

#### APPROVALS AND CERTIFICATIONS

• UL/CSA pending

#### **TARGET MARKET/ APPLICATIONS**

- Consumer
  - Household Appliances
- Industrial & Instrumentation
  - Multi-service Station
  - Display System
  - Chemical Detection System
- Data
- Power Supply Unit
- Fan
- Rack-Mount
- Interface Converter
- HDD Application
- Communications
  - Generic Telecom Box
  - Customer Premises Equipment

### **PART NUMBERS**

Description	Part Number
PCB Header Vertical, Through-Hole	10129817
Receptacle Housing	10129815
Receptacle Terminal for Power	10129084
Receptacle Terminal for Signal	72392



# 3WBMPHYB421014EA4