



Minitek® Pwr 4.2 HCC

Product Presentation

Basics Portfolio



Agenda



- Value Proposition
- Product Overview
- Product Specifications
- Features & Benefits
- Part Numbers
- Markets & Applications
- Marcomm Collaterals

Minitek® Pwr 4.2 HCC



Value Proposition

Minitek® Pwr 4.2 HCC (High Current Connector) is the solution designed for **high-current**, and **power-dense** application.

Minitek® Pwr 4.2 HCC, available for dual row from 2 to 24 circuits for Wire-to-Board, Wire-to-Wire and Wire-to-Panel mount application, is a **comprehensive solution** able to meet all customers needs and thanks to the **patented housing** is unique.

Thanks to his design Minitek® Pwr 4.2 HCC is working ideally in power system with current rating up to **13.5A per circuit**.

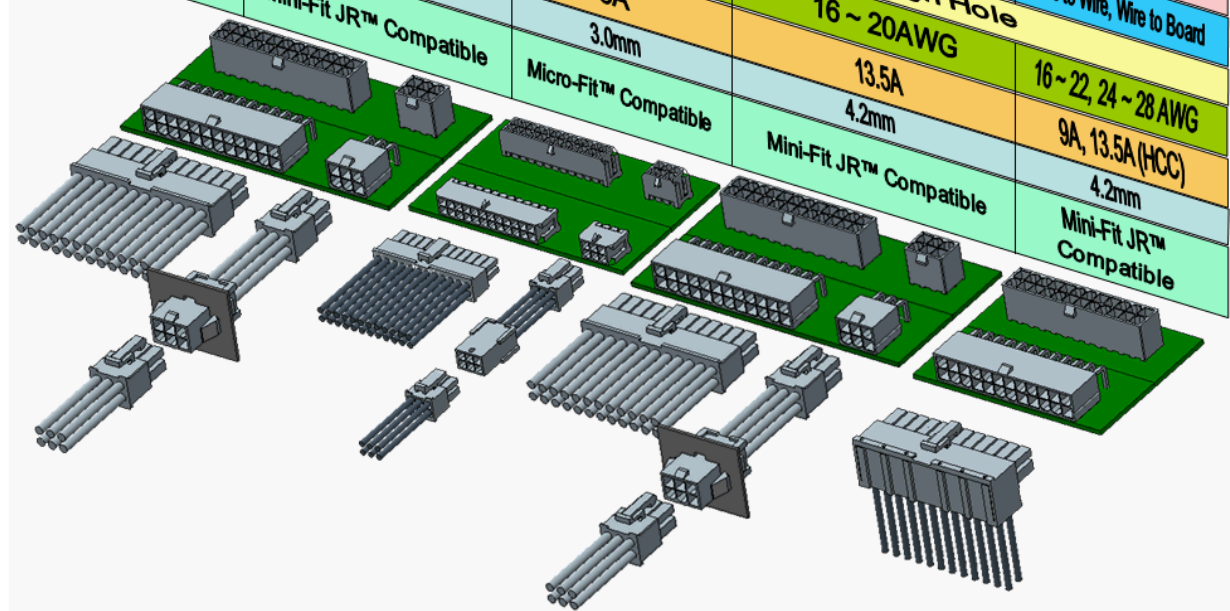
Thanks to their features, Minitek® Pwr 4.2 HCC is the ideal solution for **Consumer**, **Telecommunication**, **Data Communication** and **Industrial market**.

Minitek® Pwr 4.2 HCC



Product Overview

Circuit Size	Minitek Pwr™ 4.2		Minitek Pwr™ 3.0	Minitek Pwr™ 4.2 HCC	Right Angle Minitek Pwr™ 4.2
Available Configuration	Power: 2 ~ 24 Signal: N/A		Power: 2 ~ 24 Signal: N/A	Power: 2 ~ 24 Signal: N/A	Power: 2 ~ 24 Signal: N/A
PCB Termination	Wire to Wire, Wire to Board, Panel Mount		Wire to Wire, Wire to Board	Wire to Wire, Wire to Board, Panel Mount	Wire to Wire, Wire to Board
Applied Wire	16 ~ 22, 24 ~ 28 AWG		20 ~ 30 AWG	16 ~ 20 AWG	16 ~ 22, 24 ~ 28 AWG
Max. Current per Contact	9A		5A	13.5A	9A, 13.5A (HCC)
Pitch	4.2mm		3.0mm	4.2mm	4.2mm
Features	Mini-Fit JR™ Compatible		Micro-Fit™ Compatible	Mini-Fit JR™ Compatible	Mini-Fit JR™ Compatible



Minitek® Pwr 4.2 HCC



Product Specifications

Product Facts

- Contacts are High Current Alloy and Rated up to 13.5A per contact
- Wire-to-wire, Wire-to-board and wire-to-panel connectors with 4.2mm centerline
- Vertical and right-angle PCB headers for wave soldering application
- Same plastic housing of Minitek® Pwr 4.2 is used for HCC 4.2 series
- Available in UL94V-0 flammability nylon
- Products are lead free to help promote a cleaner environment
- Available Glow Wire compatible
- Patented right angle receptacle housing

Performance Characteristics

- Current Rating : Up to 13.5A
- Insulation Resistance: 1000M Ω Min
- Voltage rating: 600Vrms
- Insertion Force: 14.7N max.
- Withdrawal Force: 1N min.
- Durability : 30 cycles
- Operating temperature range : -40°C to +105°C

Specifications

- Pitch : 4.2mm
- Pin Count Dual row: 2 – 24
- Mating direction: Vertical & right angle
- Current rate/contact: 13.5A
- Material (Cable Receptacle)
 - Housing: Nylon66 UL94V-0, Natural and Black color
 - Terminal: High Current Alloy with optional Tin and Gold Flash plating
- Material (header)
 - Housing : Nylon66 UL94V-0, Natural and Black color
 - Terminal: High Current Alloy with optional Tin and Gold Flash plating

Technical Documents

- | | |
|---------------------|--------------|
| ▪ Product Spec. | : GS-12-1232 |
| ▪ Packaging Spec. | : GS-14-2362 |
| ▪ Application Spec. | : GS-20-0401 |

Tool Information

- Ratched hand crimping tool: 10129483-001LF
- Terminal extract tool :
 - 10129274-042LF



Minitek® Pwr 4.2 HCC



Features & Benefits

Features	Benefits
High Current Contact Alloy	Rated up to 13.5A per contact for high power system
Same plastic housing of the Minitek pwr 4.2mm	Minimize stock
Patented right-angle type receptacle housing	Ideally solution for cable routing within 1U or 2U equipment systems
Fully isolated terminals	Prevent for damage during the operations
Positive Looking on HSG with low thumb latch operation	Prevents from unexpectedly unmating
Polarized Mating Geometry	Ensure header and receptacle are correctly mated
Fully polarized housing	Prevents accidental mis-mating
High Retention Force in HSG	Well secures terminals in housing
Crimping terminals are compatible with crimping tooling	Ratched hand crimping tool and
Post-Plated Terminal	Prevention from environmental corrosion (salt spray, gas, etc.)
Glow Wire Compliant series available	Usefull for home appliances
Rohs compliant and Lead Free	Meet environmental, health and safety requirements

Minitek® Pwr 4.2 HCC



Part Numbers

Part Numbers	Description	Picture
10131318	Minitek® Pwr 4.2 HCC PCB Header Right-Angle	
10131319	Minitek® Pwr 4.2 HCC PCB Header Vertical	
10122956	Minitek® Pwr 4.2 R/A Receptacle Housing with cover	
10127815	Minitek® Pwr 4.2 Receptacle Housing	
10127816	Minitek® Pwr 4.2 Panel Mount Plug Housing	
10130517	Minitek® Pwr 4.2 HCC Female Terminal	
10131317	Minitek® Pwr 4.2 HCC Male Terminal	

Minitek® Pwr 4.2 HCC



Main Markets & Application

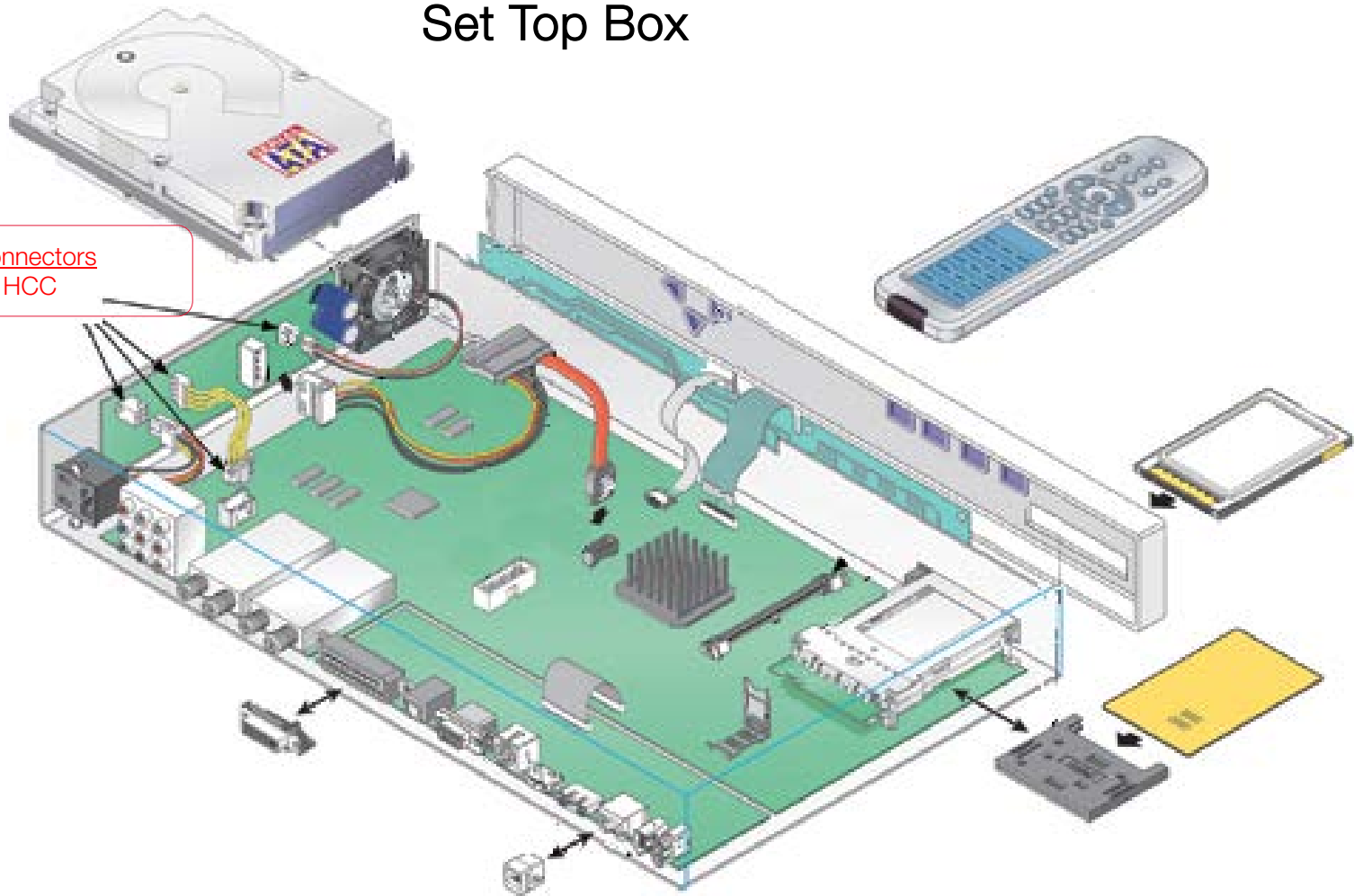
- Consumer
 - Set Top Box
 - Refrigerator
 - Air Conditioning
- Industrial & Instrumentation
 - Medical
 - Hospital Bed
 - Defibrillator
 - Patient Monitor
 - Ultrasound Equipment
 - Military
 - Chemical Detection System
 - Radar Equipment
 - Customer Premises Equipment
- Data
 - HDD
 - Rack – Mount Server
 - Server
 - Desktop Pc and MotherBoard
- Telecommunications
 - 1U Rack Box
 - Telecom Box
 - Wi – Max Box
 - Interface Converter
 - Customer Premises Equipment



Minitek® Pwr 4.2 HCC

Markets & Application – Consumer

Set Top Box

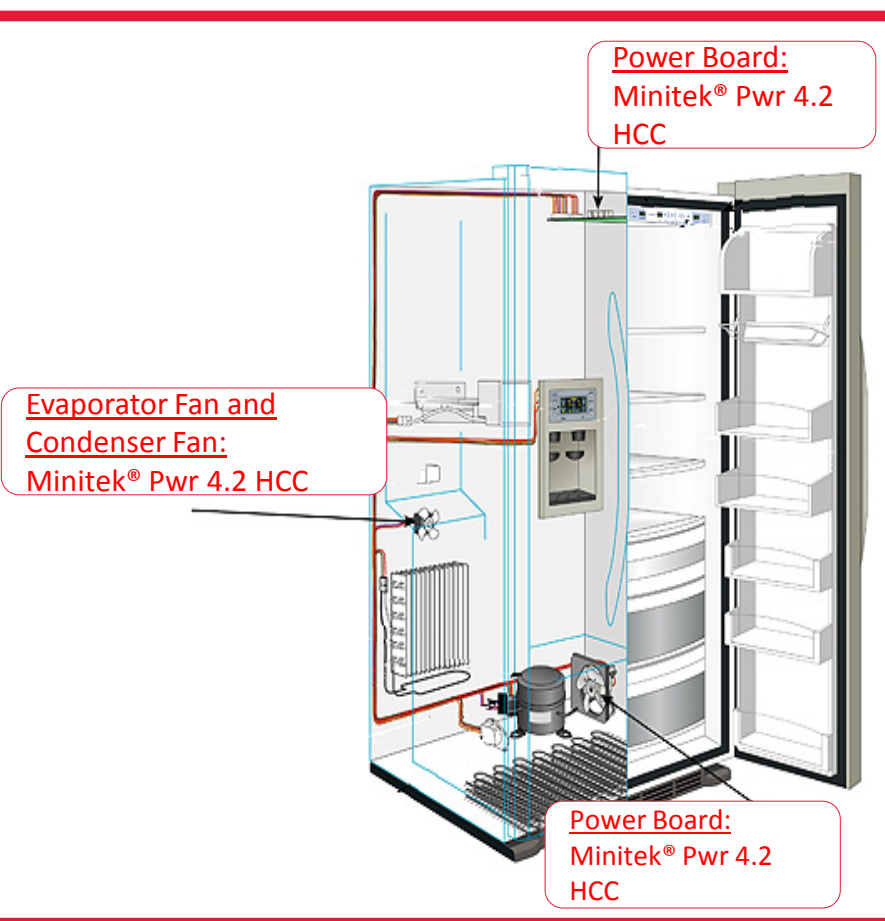


Minitek® Pwr 4.2 HCC

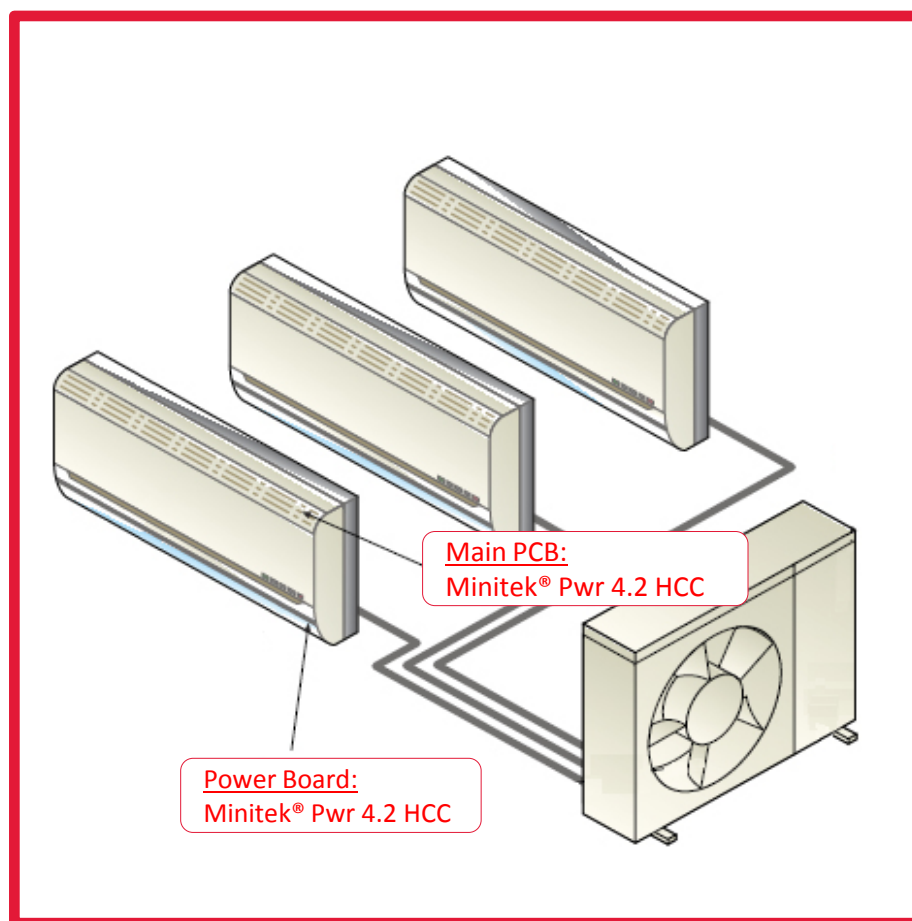


Markets & Application – Consumer

Refrigerator



Air Conditioning

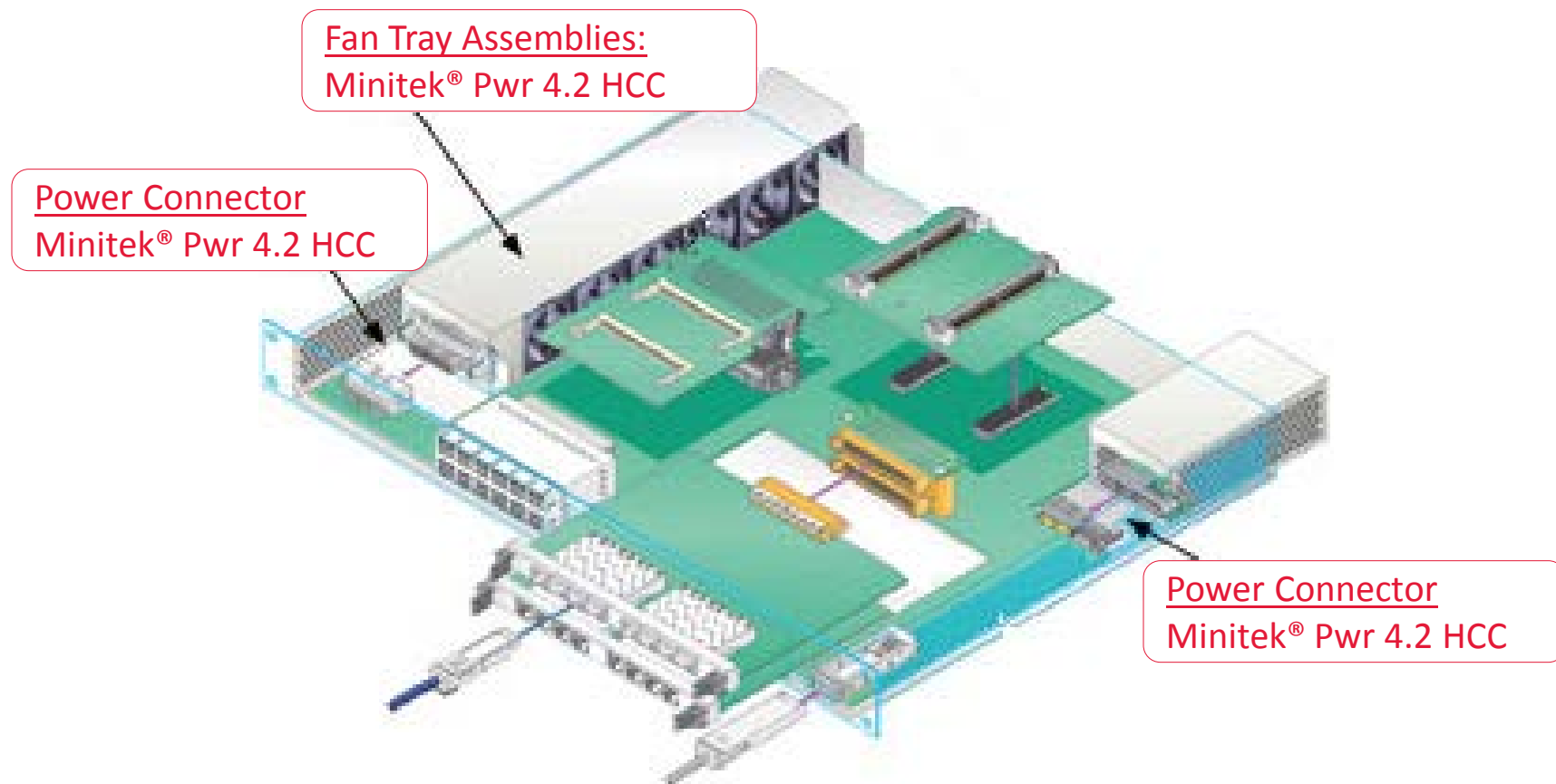


Minitek® Pwr 4.2 HCC



Markets & Application – Telecom

1U Rack Box

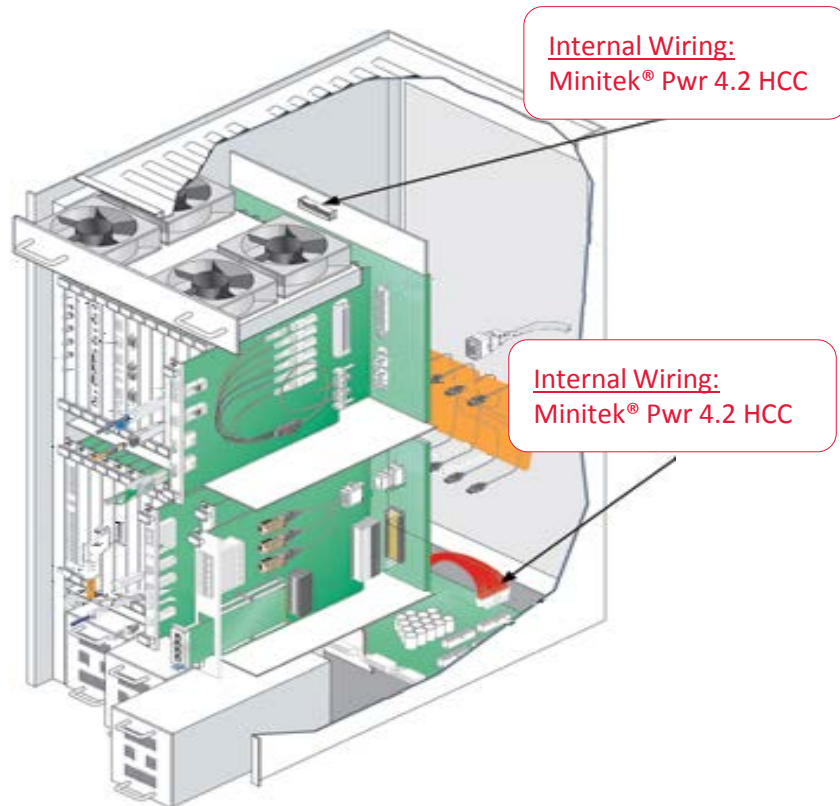


Minitek® Pwr 4.2 HCC

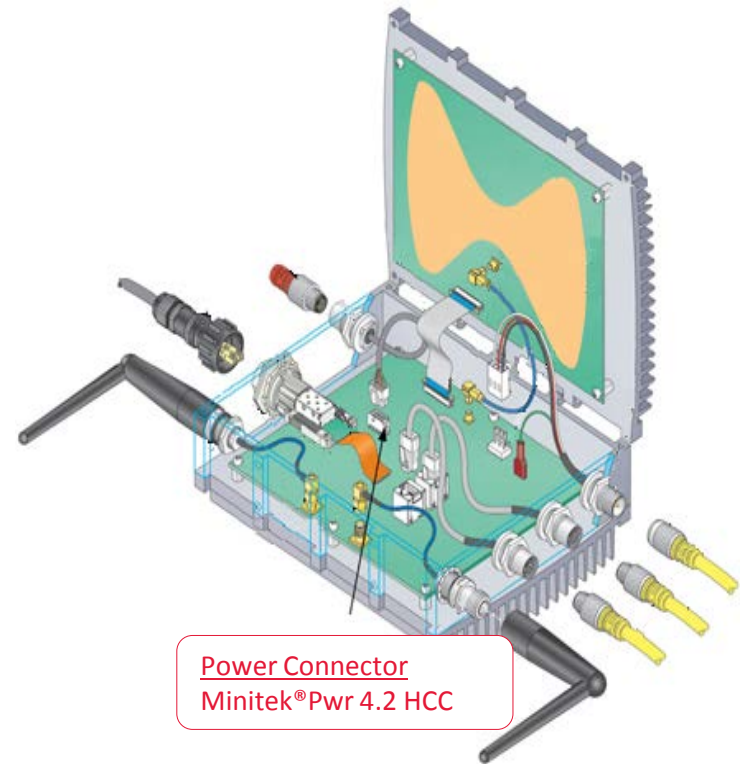
Markets & Application – Telecom



Telecom Box

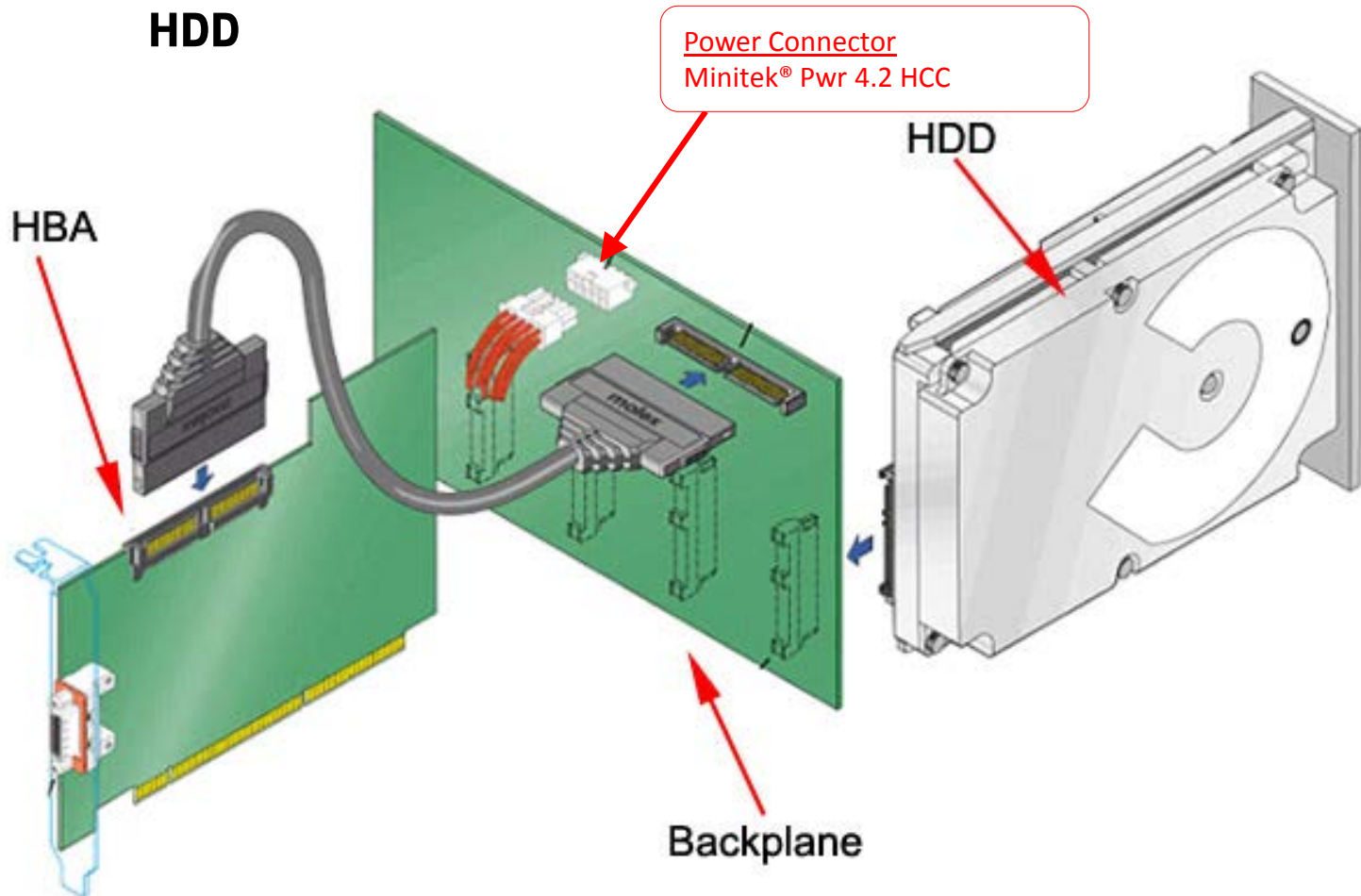


Wi-Max Box



Minitek® Pwr 4.2 HCC

Markets & Application – Data

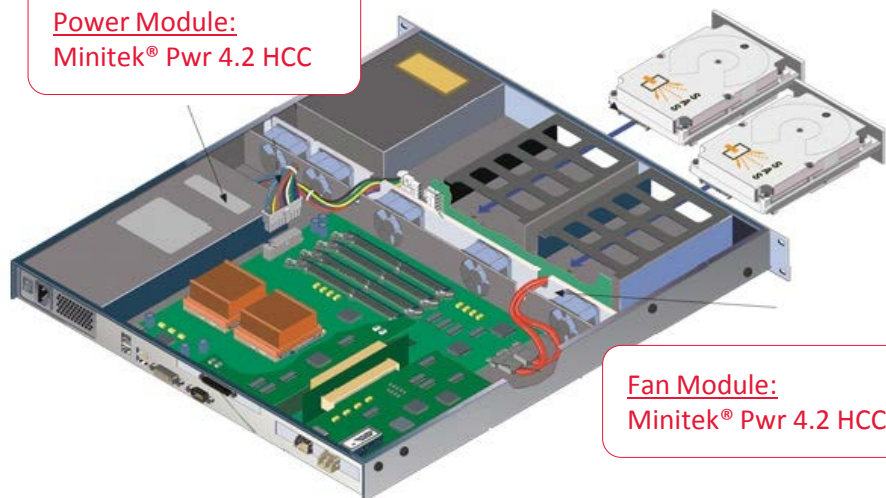


Minitek® Pwr 4.2 HCC

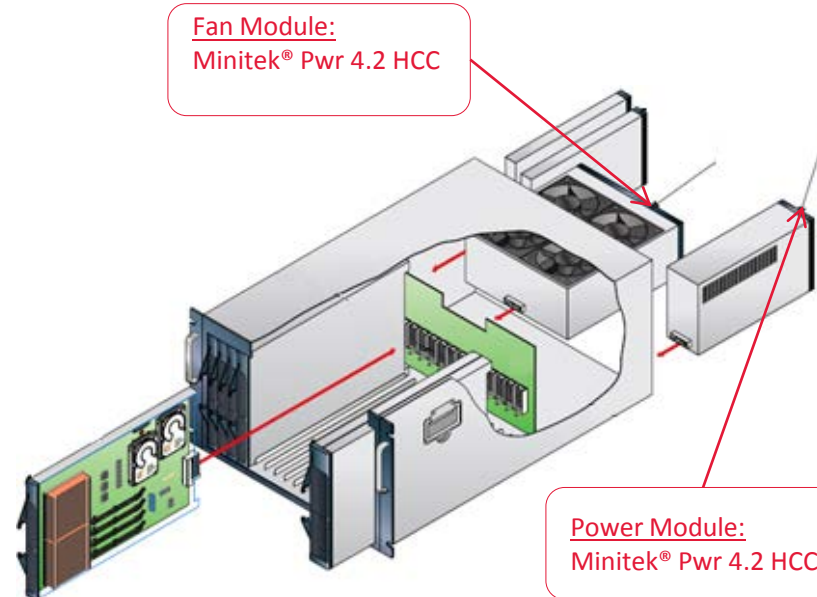
Markets & Application – Data



Rack-Mount Server



Blade Server

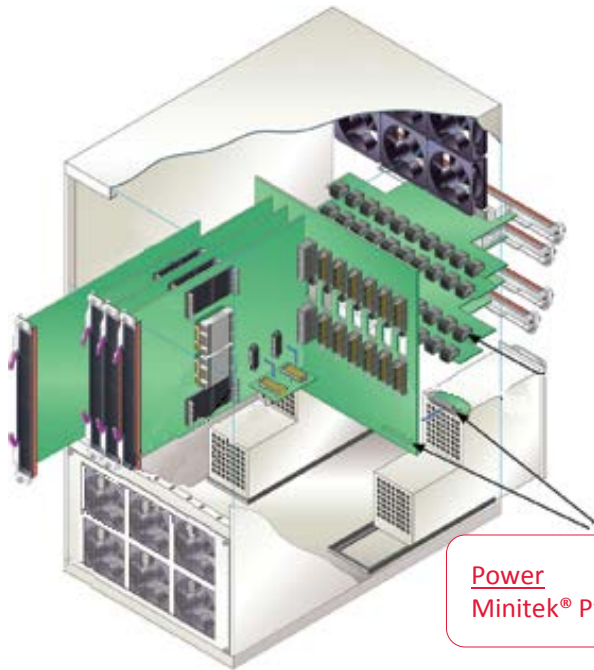


Minitek® Pwr 4.2 HCC

Markets & Application – Data



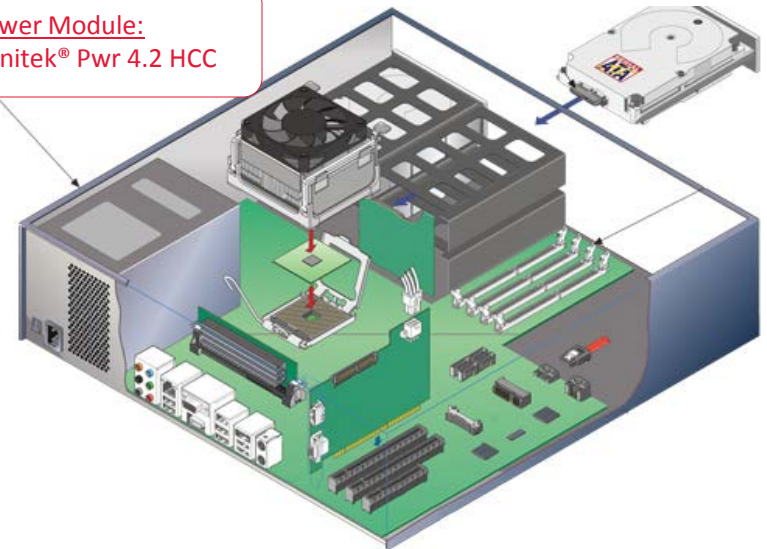
Server



Power
Minitek® Pwr 4.2 HCC

Desktop PC and MotherBoard

Power Module:
Minitek® Pwr 4.2 HCC

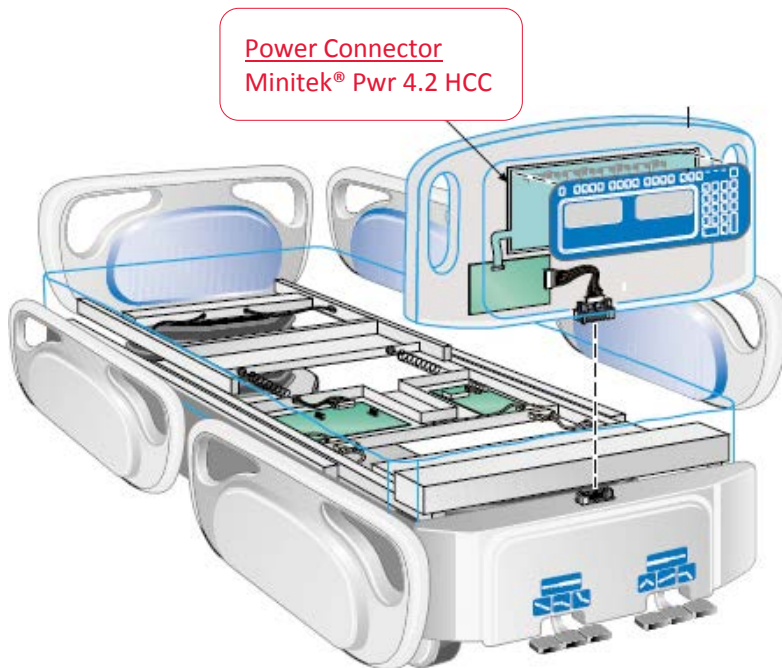


Minitek® Pwr 4.2 HCC

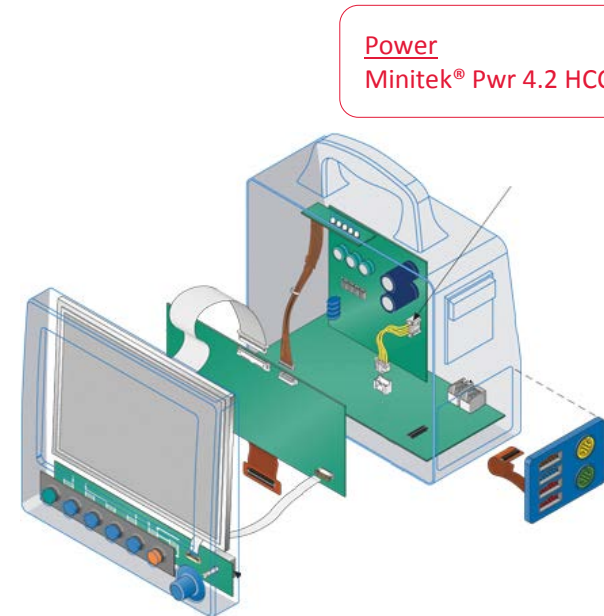
Markets & Application – Medical



Hospital Bed



Patient Monitor



Minitek® Pwr 4.2 HCC

Collaterals

Available on FCI.com:

- Technical Data Sheet
- Part Numbers & Drawings





THANK YOU

