



Minitek[®] Pwr 3.0 HCC

Product Presentation

Amphenol
FCi

Minitek® Pwr 3.0 HCC

Agenda

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

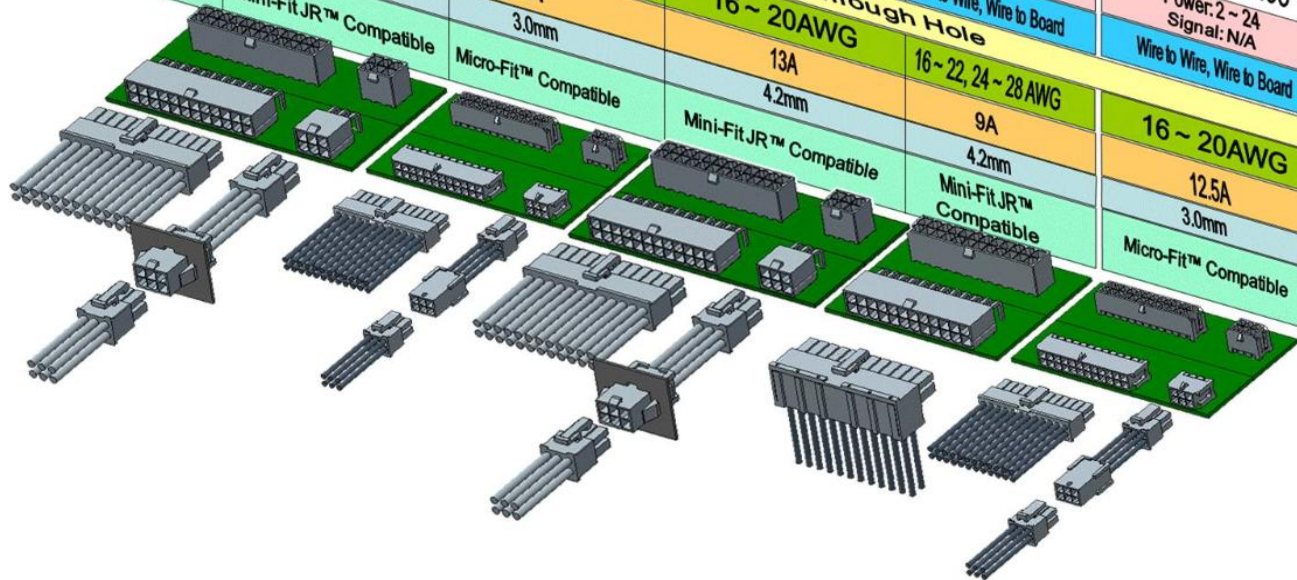
Value Proposition

- Minitek® Pwr 3.0 High Current Connector HCC are designed for power application with **current rating up to 12A** per circuit, available for **dual row** and **2 to 24** circuits for Wire-To-Wire and Wire-To-Board application.
- Crimp, snap-in, header and receptacle contacts are used to terminate **16AWG -20AWG** wires. Header and receptacle housings allow **Wire-To-Wire** and **Wire-To-Board configurations**. Crimping and removal tools are available for wire harness assembly.
- Crimping and removal tools of Minitek® Pwr 3.0 could be used on Minitek® Pwr 3.0 HCC. Header assemblies for Wire-To-Board interconnections include vertical and angle components. These wave soldering headers are available in through-hole configurations.

Minitek® Pwr 3.0 HCC

Product Overview

Circuit Size	Minitek Pwr™4.2	Minitek Pwr™3.0	Minitek Pwr™4.2 HCC	RightAngle Minitek Pwr™4.2	Minitek Pwr™3.0 HCC
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	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	Wire to Wire, Wire to Board
Applied Wire	16 ~ 22, 24 ~ 28 AWG	20 ~ 30 AWG	16 ~ 20 AWG	16 ~ 22, 24 ~ 28 AWG	16 ~ 20 AWG
Max. Current per Contact	9A	5A	13A	9A	12.5A
Pitch	4.2mm	3.0mm	4.2mm	4.2mm	3.0mm
Features	Mini-Fit JR™ Compatible	Micro-Fit™ Compatible	Mini-Fit JR™ Compatible	Mini-Fit JR™ Compatible	Micro-Fit™ Compatible



Product Specifications

Product Facts

- Contacts are High Current Alloy and Rated up to 12A per contact
- Wire-to-wire and Wire-to-board connectors with 3.0mm centerline
- Vertical and right-angle PCB headers for wave soldering application
- Available in UL94V-0 flammability nylon
- Products are lead free to help promote a cleaner environment
- Available Glow Wire compatible

Performance Characteristics

- Current Rating : Up to 12A
- Insulation Resistance: 1000M Ω Min
- Voltage rating: 600Vms
- Insertion Force: 14.7N max.
- Withdrawal Force: 1N min.
- Durability : 30 cycles
- Operating temperature range : -40°C to +105°C

Tool Information

- Ratched hand crimping tool: 10129483-001LF
- Terminal extract tool : 10129274-030LF

Specifications

- Pitch : 3.0mm
- Pin Count Dual row: 2 – 24
- Mating direction: Vertical & right angle
- Current rate/contact: 12A
- Material (Cable Receptacle)
 - Housing: High Temperature Thermoplastic
 - UL94V-0, Black color
 - Terminal: High Current Alloy with optional Tin and Gold Flash plating
- Material (header)
 - Housing : Housing: High Temperature Thermoplastic
 - UL94V-0, Black color
 - Terminal: High Current Alloy with optional Tin and Gold Flash plating

Technical Documents

- | | |
|---------------------|--------------|
| ▪ Product Spec. | : GS-12-1291 |
| ▪ Packaging Spec. | : GS-14-2419 |
| ▪ Application Spec. | : GS-20-0401 |

Features & Benefits

Features	Benefits
Contacts are High Current Alloy	Rated up to 12A per contact
Fully isolated terminals	Prevents terminals from potential damage during operation
Positive locking on HSG with low thumb latch operation	Prevents from unexpectedly unmating
Polarized mating geometry	Ensure header and receptacle are correctly mated
Fully polarized housings	Prevents accidental mis-mating
High retention force in HSG	Well secures terminals in housings
Crimping terminals are compatible with crimping tooling	Ratched hand crimping tool and Terminal extract tool of Minitek Pwr®3.0 are shareable
Post-Plated Terminal	To prevent from environmental corrosion, for example, salt spray or gas corrosion
Glow Wire Compliant series available	Supports home appliances requirement
Available in UL94V-0 flammability rated nylon	High flammability rating
RoHS compliance and Lead-Free	Meets environmental, health and safety requirements

Minitek® Pwr 3.0 HCC

Part Numbers

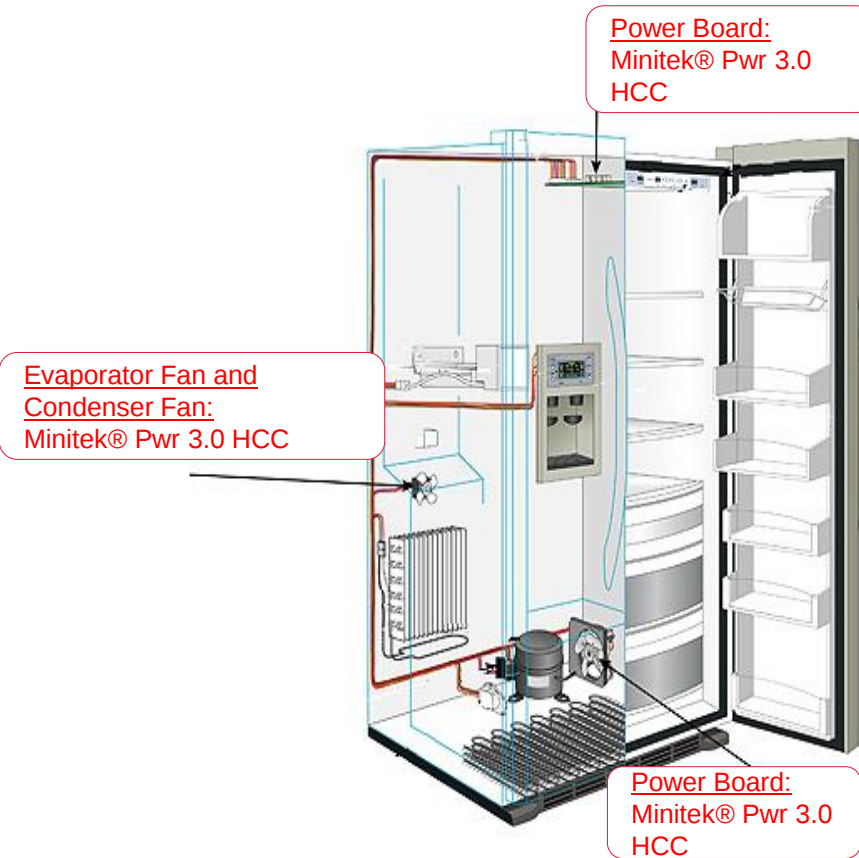
Part Numbers	Description	Picture
10132449	Minitek® Pwr 3.0 HCC PCB Header Right-Angle	
10132450	Minitek® Pwr 3.0 HCC PCB Header Vertical	
10132445	Minitek® Pwr 3.0 HCC Receptacle Housing	
10132446	Minitek® Pwr 3.0 HCC Plug Housing	
10132447	Minitek® Pwr 3.0 HCC Female Terminal	
10132448	Minitek® Pwr 3.0 HCC Male Terminal	

Main Markets & Application

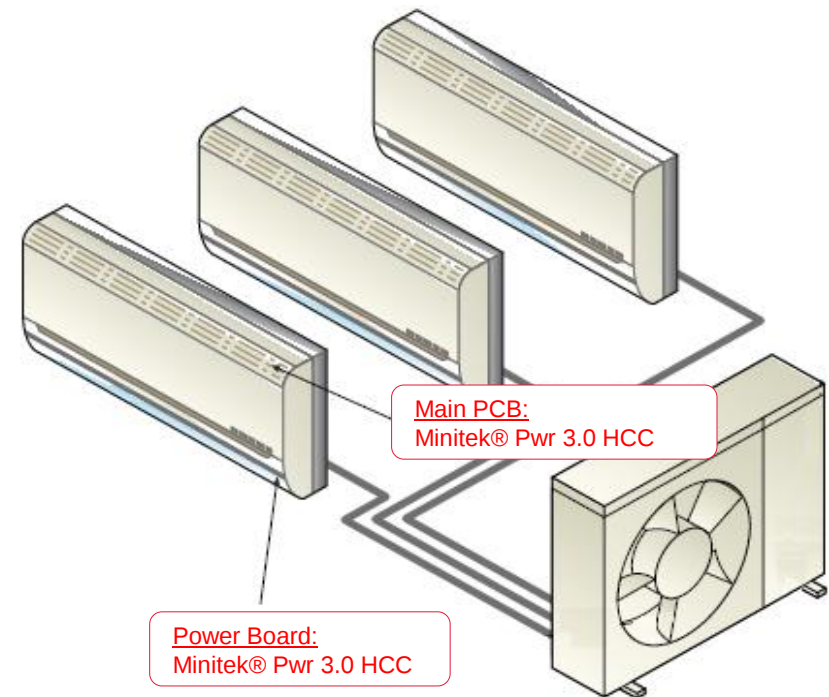
- **Consumer**
 - Set Top Box
 - Refrigerator
 - Air Conditioning
- **Industrial & Instrumentation**
 - Medical
 - Hospital Bed
 - Defibrillator
 - Patient Monitor
 - Ultrasound Equipment
 - Military
 - Chemical Detection System
 - Radar Equipment
 - Customer Premises Equipment
- **Data**
 - HDD
 - Rack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

Markets & Application - Consumer

Refrigerator



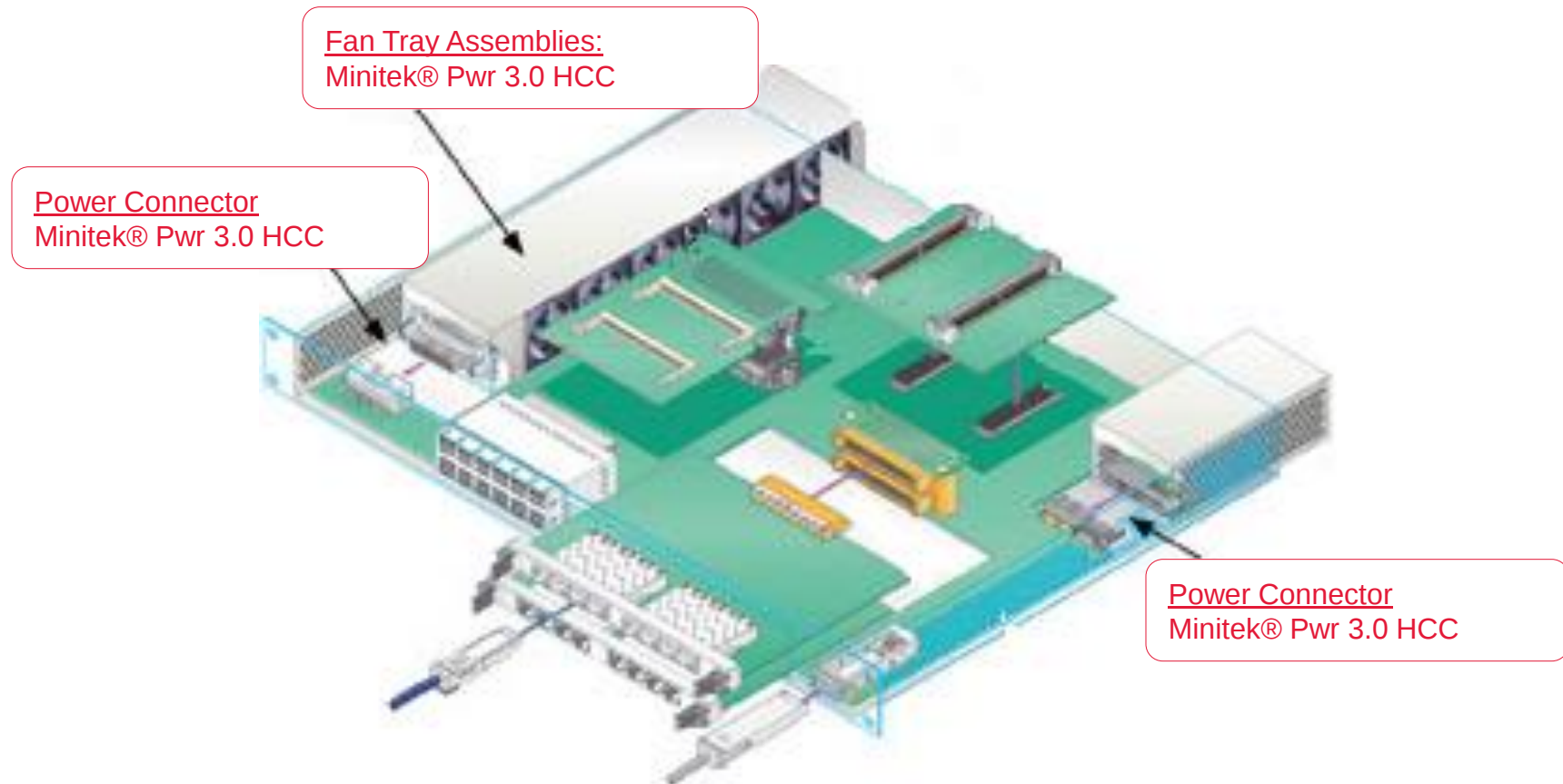
Air Conditioning



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Markets & Application - Telecom

1U Rack Box



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Markets & Application - Telecom

Telecom Box

Internal Wiring:
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Internal Wiring:
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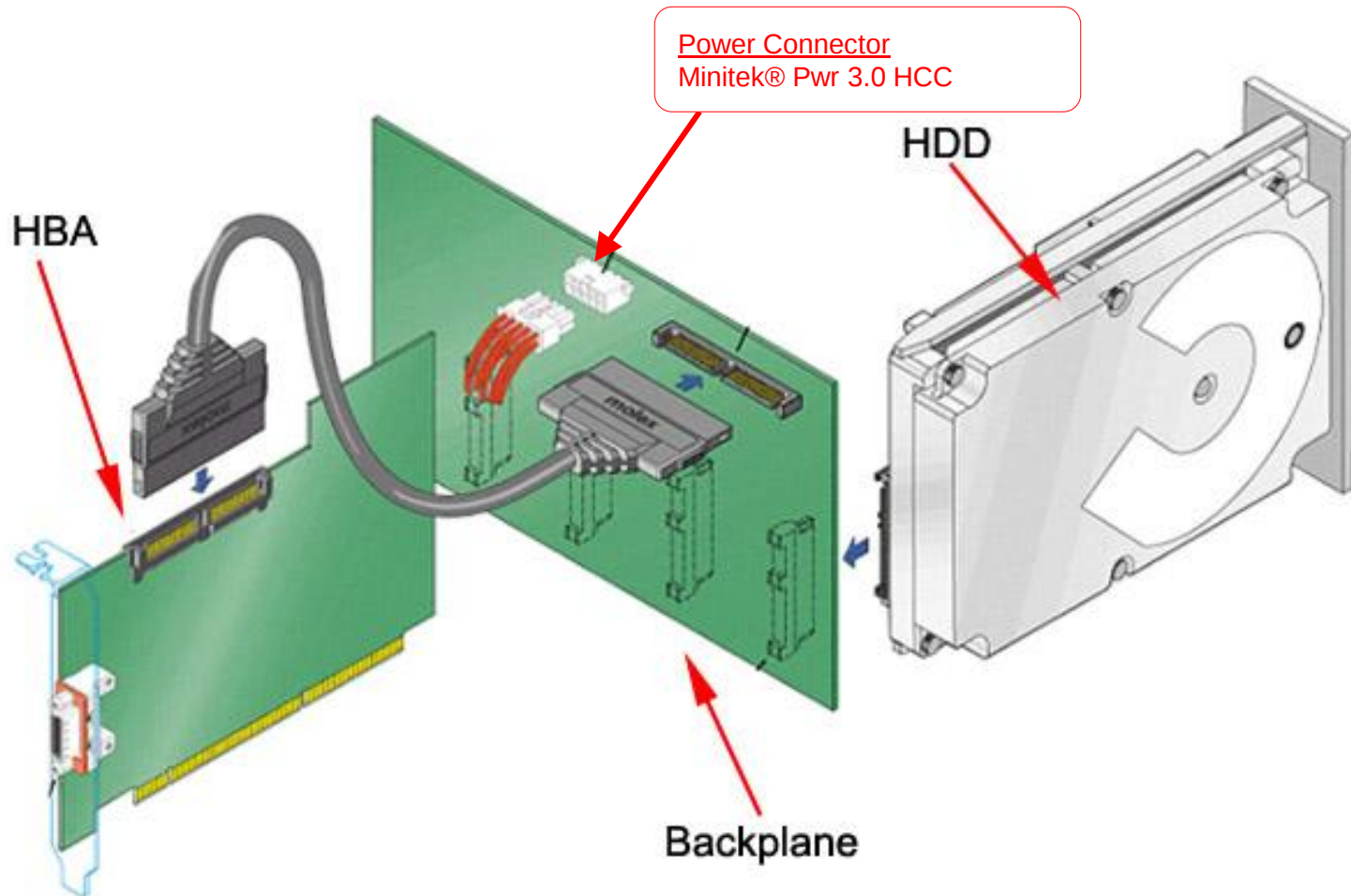
Wi-Max Box

Power Connector
Minitek® Pwr 3.0 HCC

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Markets & Application - Data

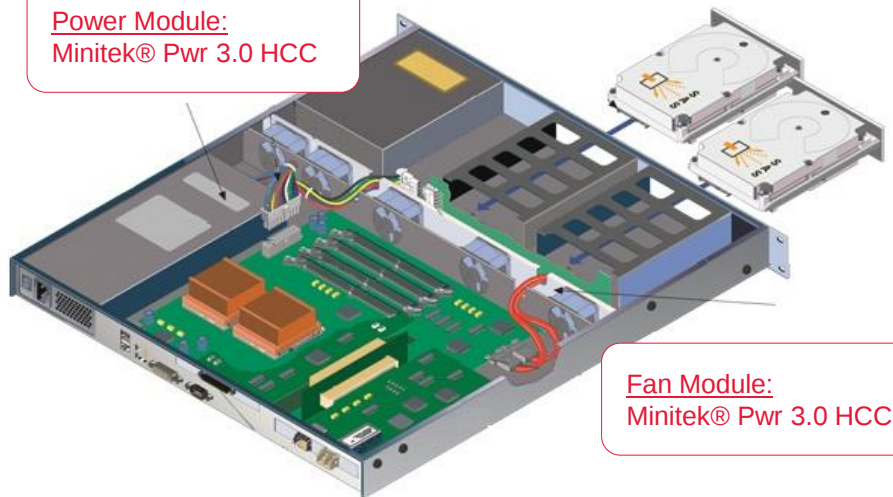
HDD



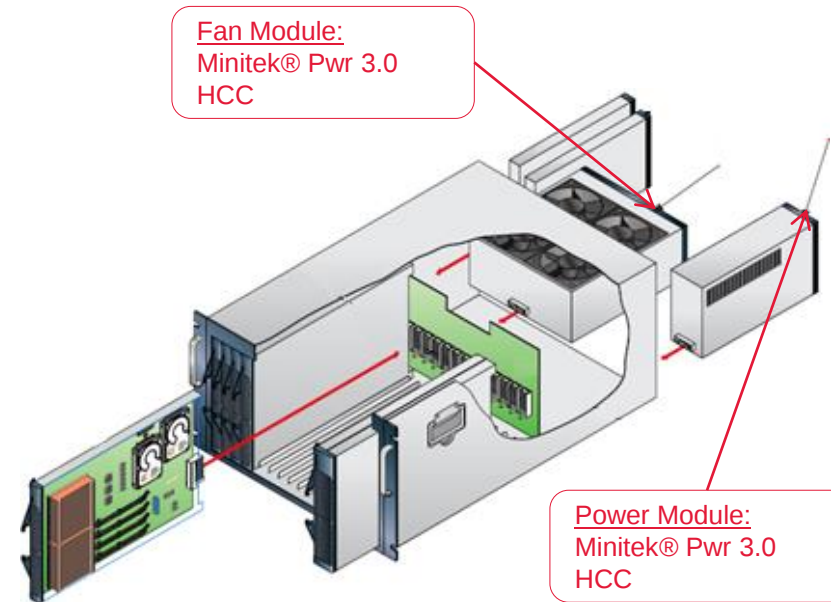
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Markets & Application - Data

Rack-Mount Server



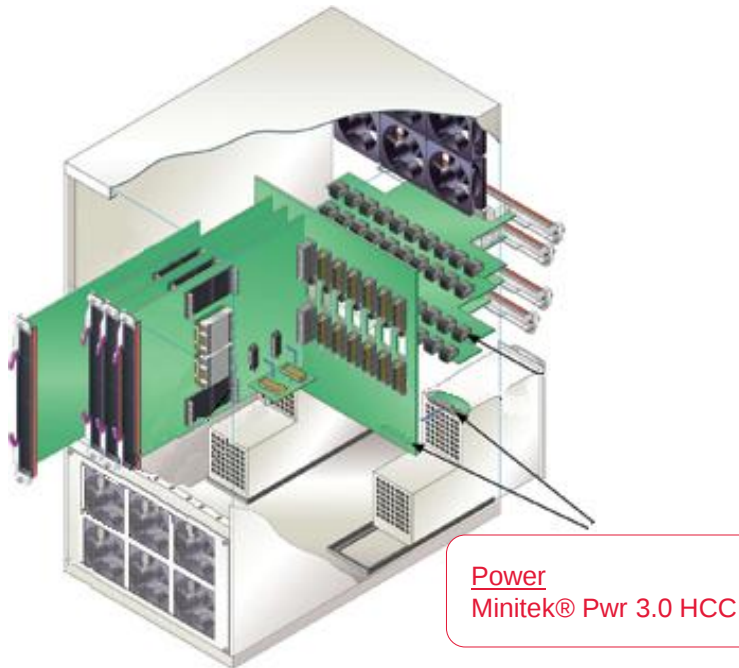
Blade Server



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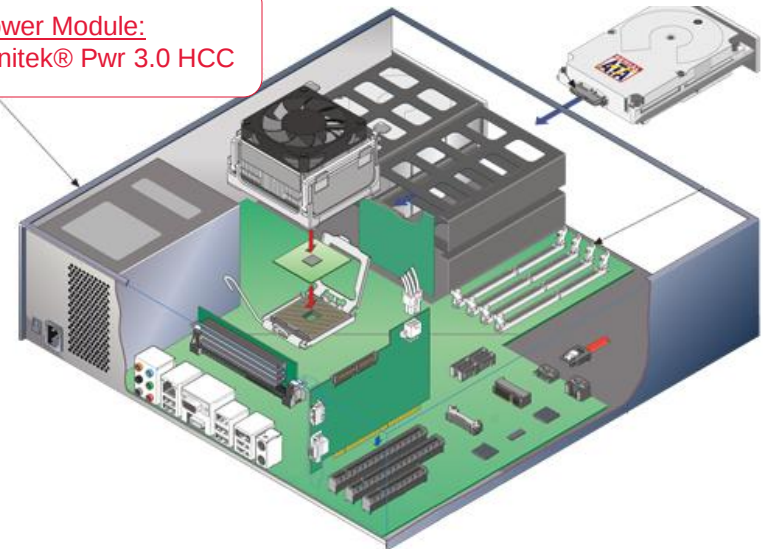
Markets & Application - Data

Server



Desktop PC and Mother Board

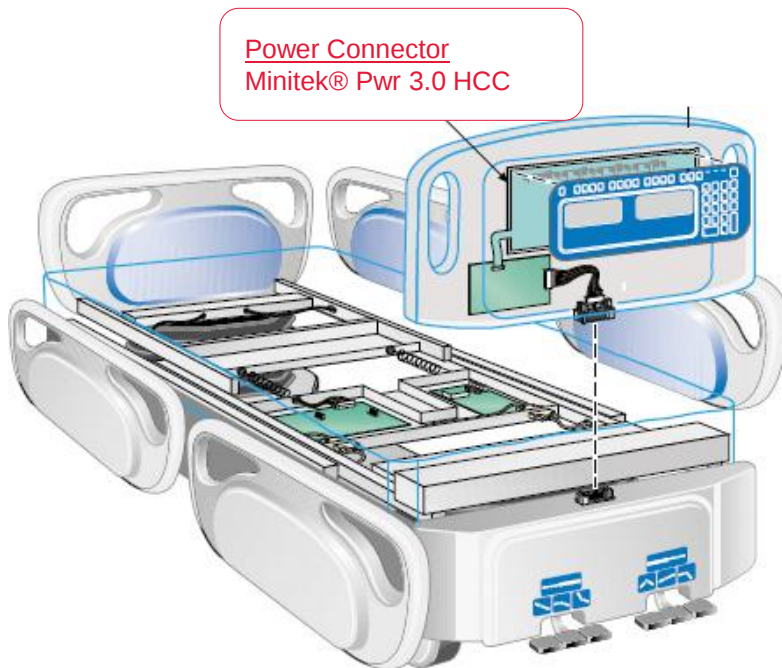
Power Module:
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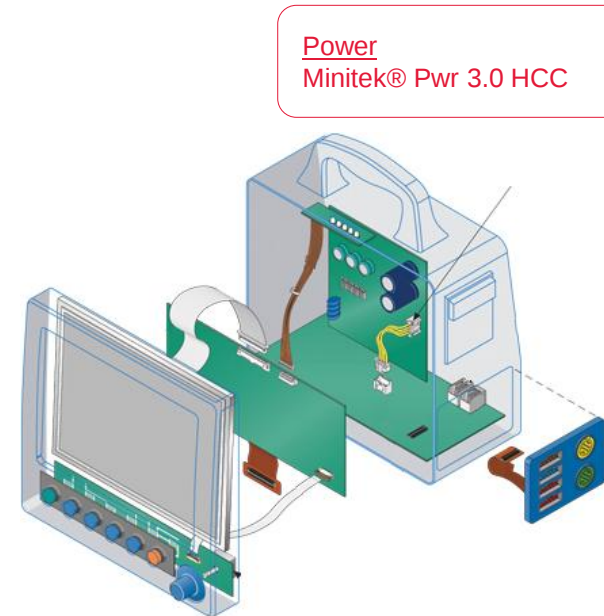
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Markets & Application - Medical

Hospital Bed



Patient Monitor



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Collaterals

Available on FCI.com:

- Technical Data Sheet
- Part Numbers & Drawings



THANK YOU

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