



Minitek® Pwr 3.0
Product Presentation
Basics Portfolio



Agenda



- Value Proposition
- Product Overview
- Product Specifications
- Features & Benefits
- Part Numbers
- Stacking Height Matrix
- Markets & Applications
- Marcom Collaterals

Minitek® Pwr 3.0



Value Proposition

Minitek® Pwr 3.0mm is a flexible and comprehensive solution designed for power application with current rating up to 5A per circuit, available in dual row and 2 to 24 circuits.

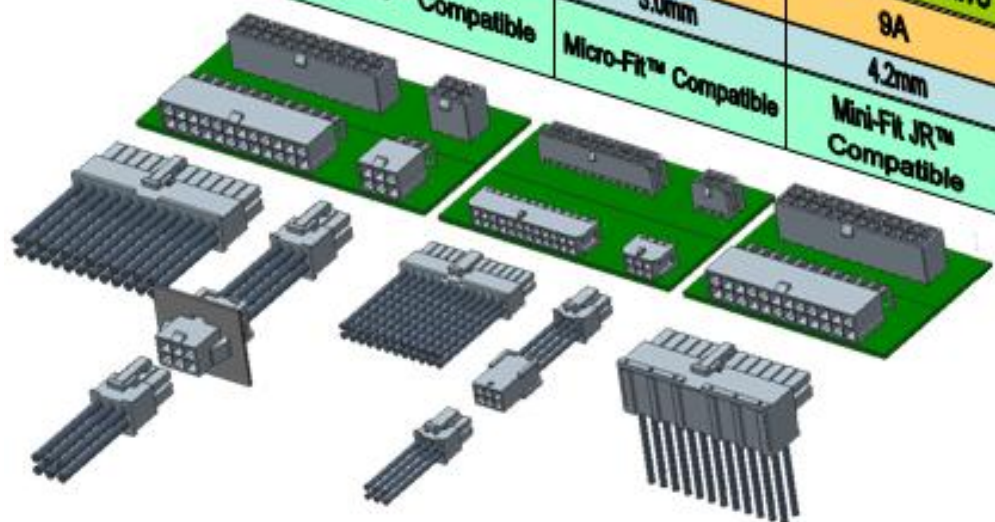
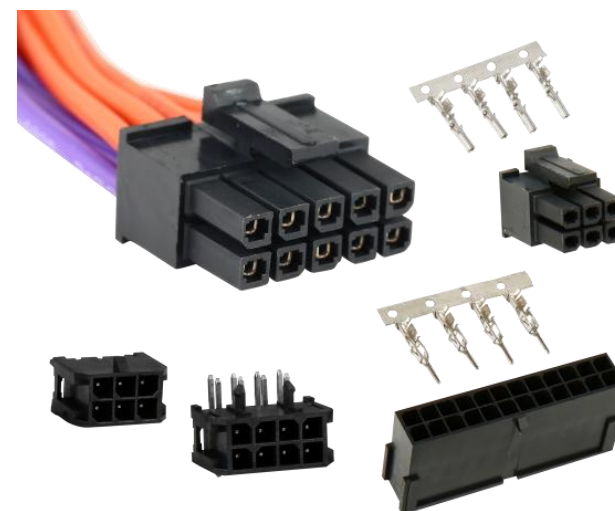
Crimp, snap-in header and receptacle contacts are used to terminate 30AWG-20AWG wires. Header and receptacle housings allow Wire-To-Wire and Wire-To-Board configurations. Crimping and removal tools are available for wire harness assembly. Header assemblies for Wire-To-Board interconnections include vertical and right angle components. These wave soldering headers are available in through-hole configurations

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Product Overview



Circuit Size	Minitek Pwr™4.2		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
PCB Termination	Wire to Wire, Wire to Board, Panel Mount	Wire to Wire, Wire to Board	Wire to Wire, Wire to Board
Applied Wire	Right Angle & Vertical Through Hole		
Max. Current per Contact	16 ~ 22, 24 ~ 28 AWG	20 ~ 30 AWG	16 ~ 22, 24 ~ 28 AWG
Pitch	9A	5A	9A
Features	4.2mm	3.0mm	4.2mm
	Mini-Fit JR™ Compatible	Micro-Fit™ Compatible	Mini-Fit JR™ Compatible

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Product Specifications



Product Facts

- Wire-to-wire and Wire-to-board connector system
- Contacts are on 3.0mm (0.118") centerline spacing
- 2-24 contact positions - dual row
- Dual beam contact design for reliable interconnection
- Contact accept 20-30 AWG wire with insulation
 - diameter of 1.85mm maximum
- Contact available in strip form
- PCB mount pin header assembly in both vertical and
 - right-angle styles
- Right-angle & vertical through-hole PCB header

Performance

- PCB headers are wave soldering compatible
- Low Approved Contact Resistance: 20mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 250V rms
- Current Rating: 5A/contact. Refer to product specifications for higher current application
- Dielectric Withstand Voltage: 1000 VAC
- Temperature Rise: 30°C max.

Environmental

- Operating Temperature : -40~105°C & -40~85 °C

Mechanical Performances

- Terminal Insertion Force: 4.5N max and 2N min before durability, 1.5N min after durability
- Terminal Withdrawal Force: 3.7N min.
- Durability: 100 cycles
- Wire Pullout Force: Refer to product specifications

Specifications

- Product specification GS-12-1181
- Package specification GS-14-2362
- Application specification GS-20-0401

Tool Information

- Ratchet Hand Crimping Tool: 10129483-001LF
- Terminal Extraction Tool: 10129274-030LF

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Features & Benefits

Features	Benefits
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	Ensures header and receptacle are correctly mated
Scoop-proof housings	Ensures terminals and header pins are not damaged for angled mating
Low insertion force for installation of crimped terminal	Easy to use
Vertical and right-angle PCB headers for wave soldering application	Supports various 1.6mm PCB applications
Cost-effective Wire-To-Wire, free hanging headers and vertical or right-angle pin headers solution	Flexible applications in various situations
Glow Wire Compliant series available	Supports home appliances requirements

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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

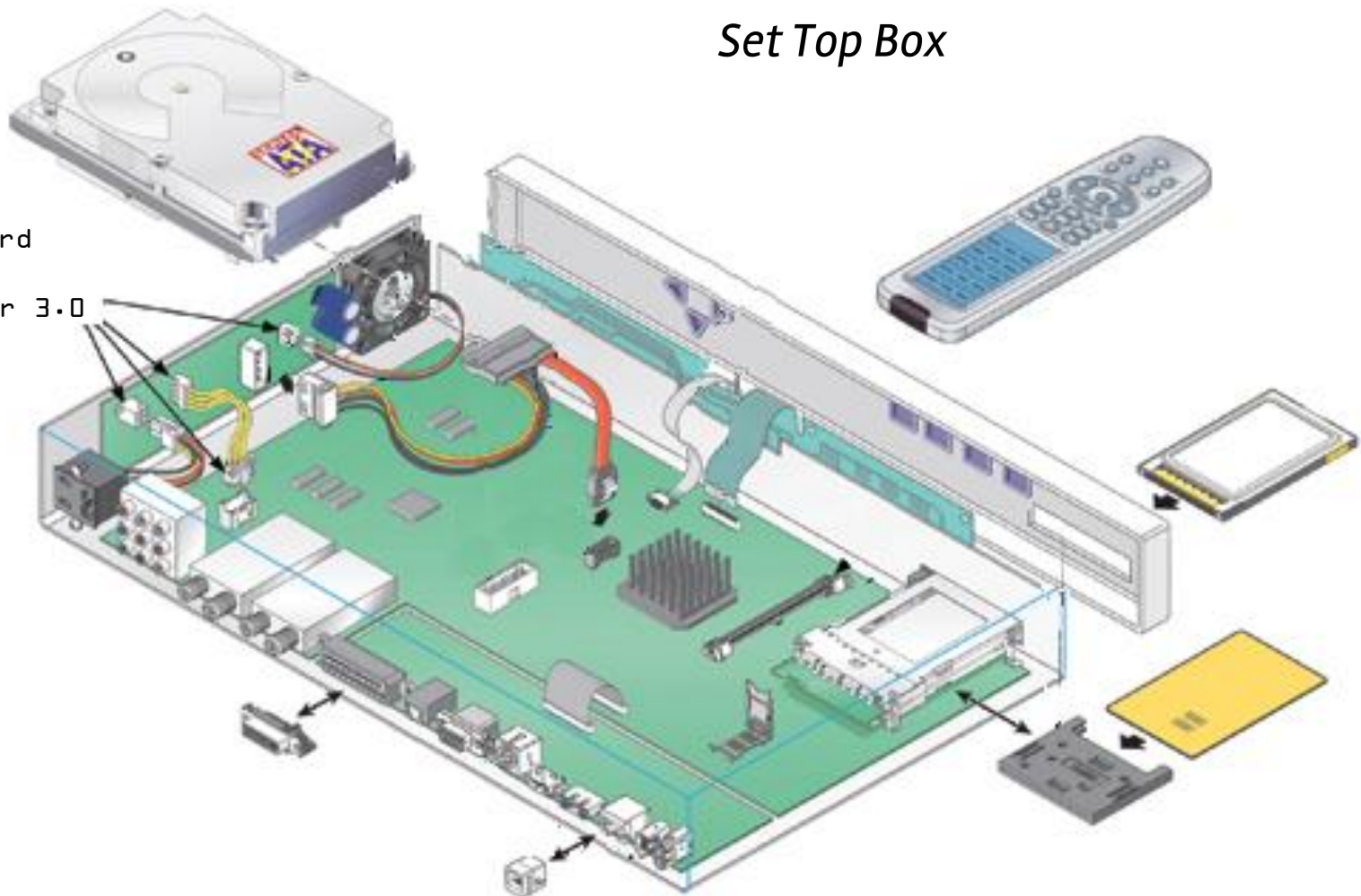
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Markets & Application – Consumer

Set Top Box

Wire-to-Board
Connectors
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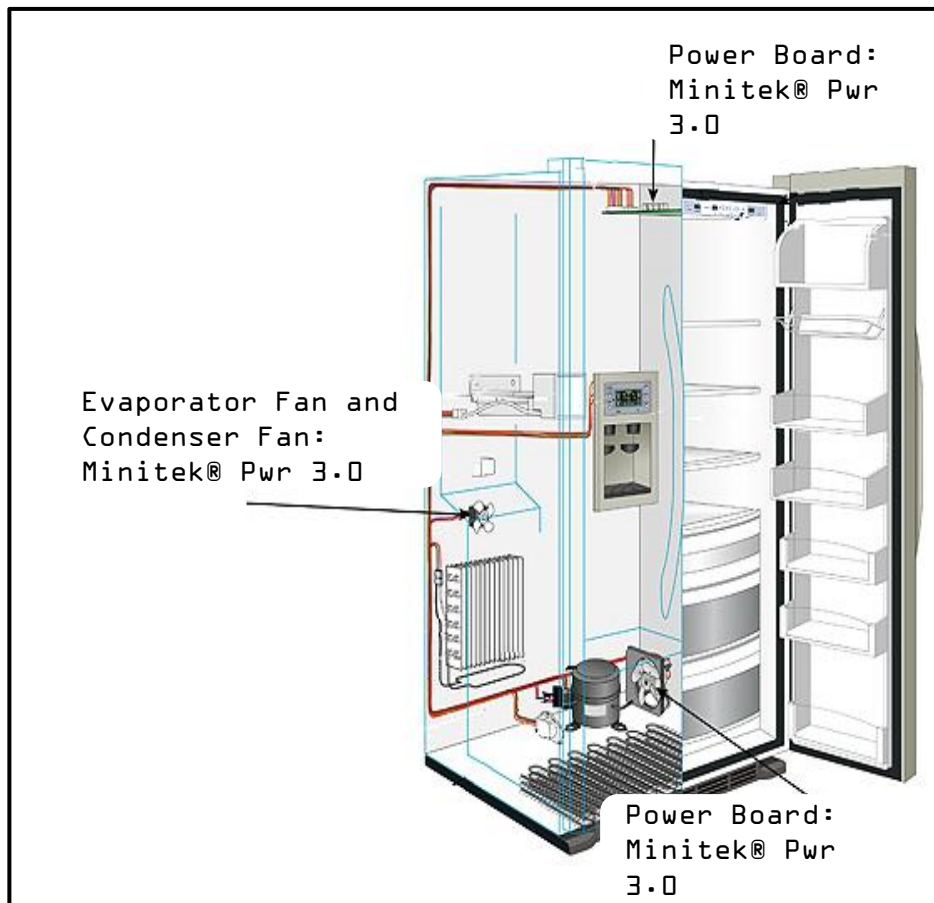


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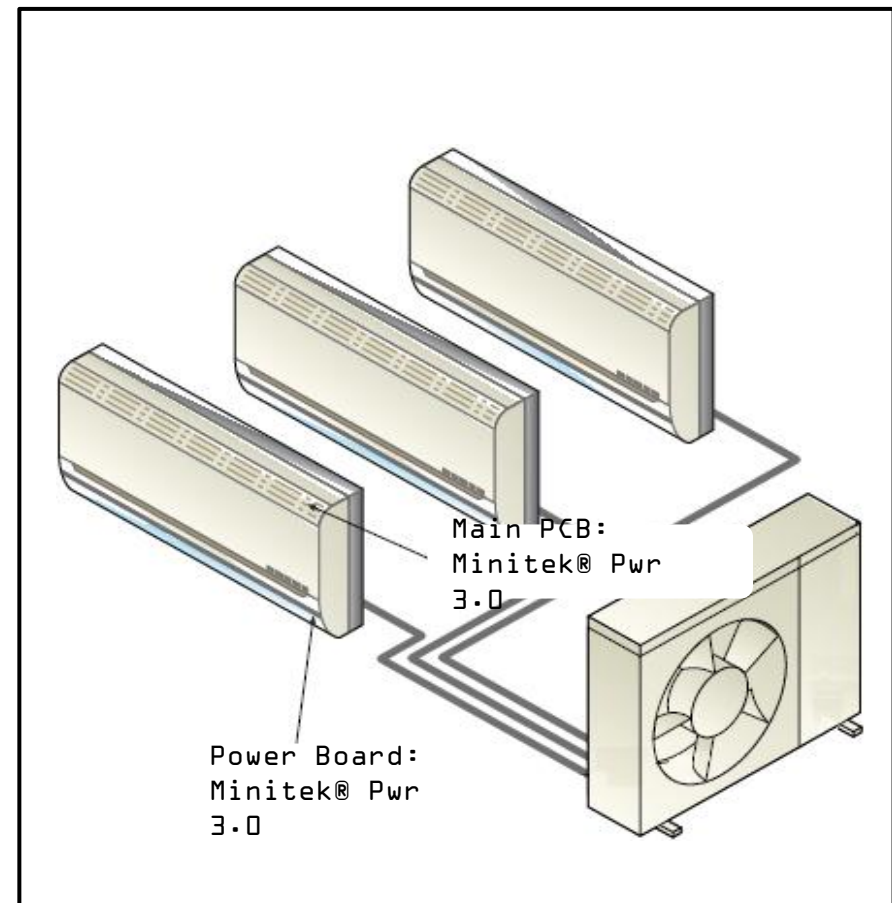


Markets & Application – Consumer

Refrigerator



Air Conditioning

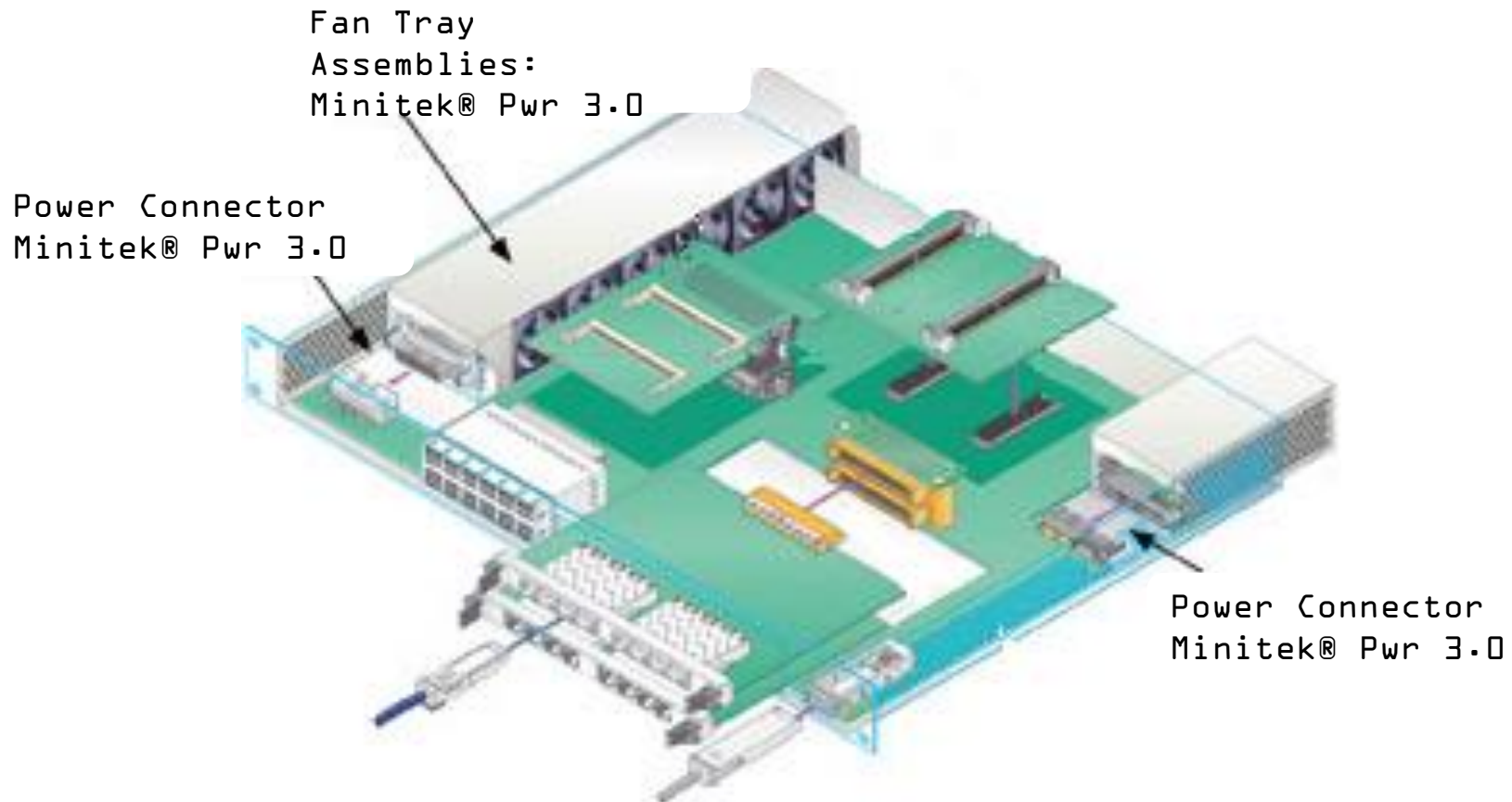


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Markets & Application – Telecom

1U Rack Box

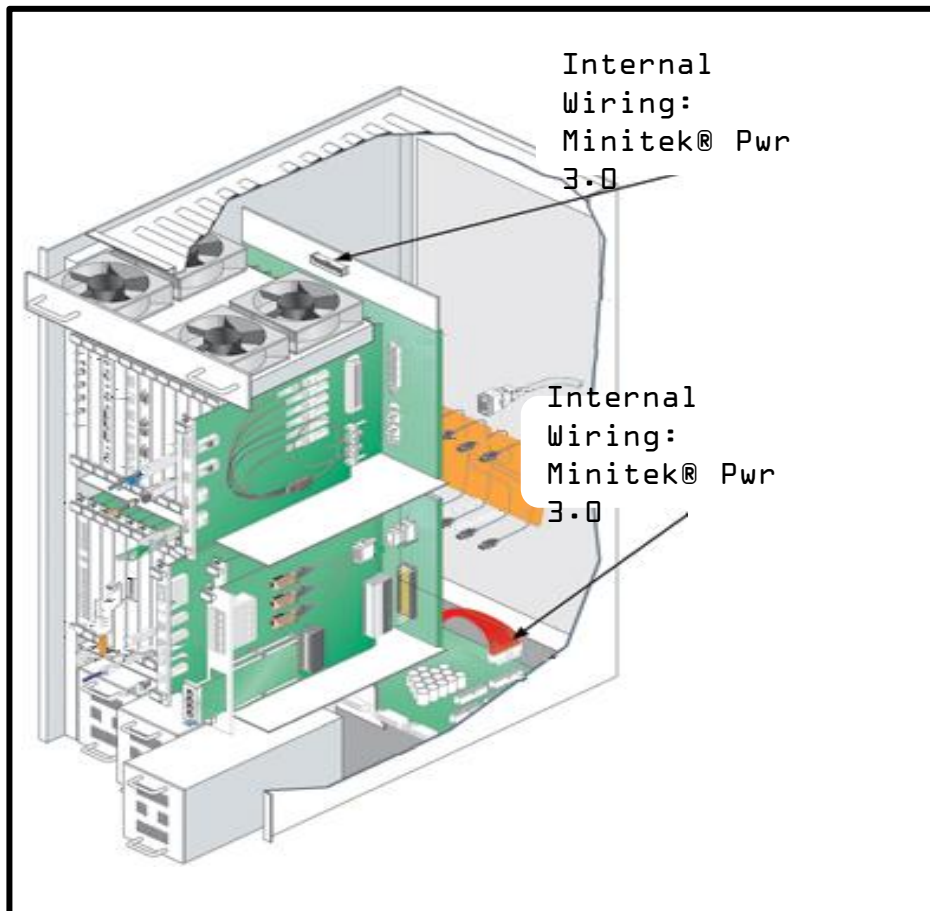


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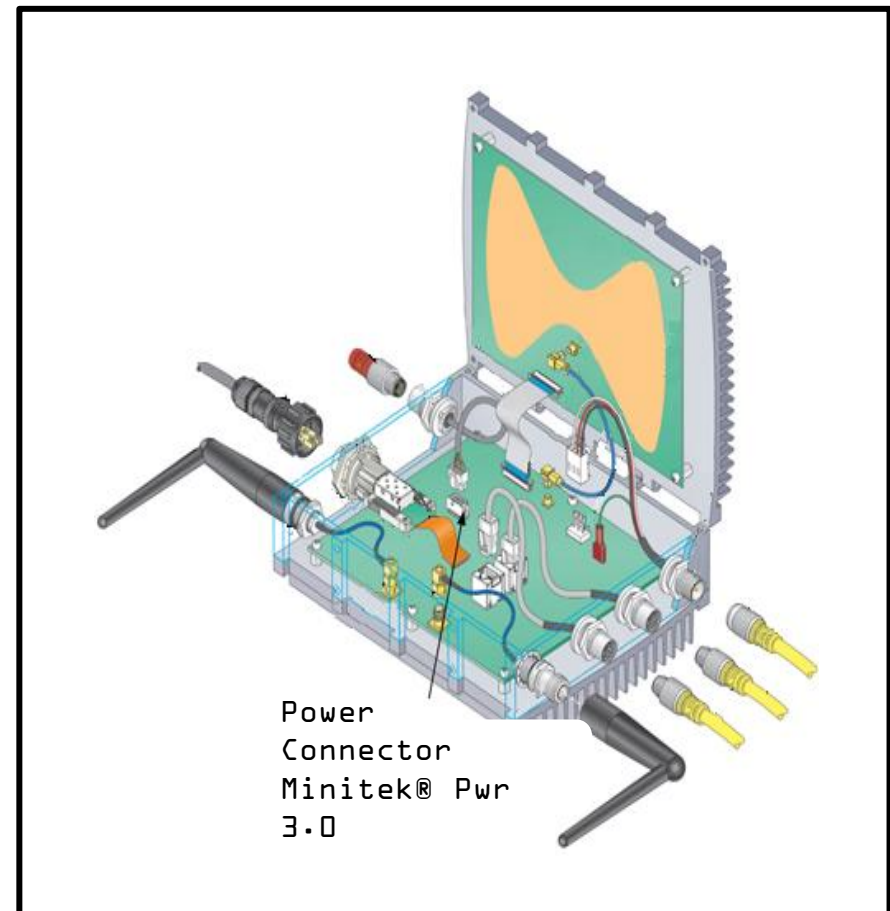
Markets & Application – Telecom



Telecom Box



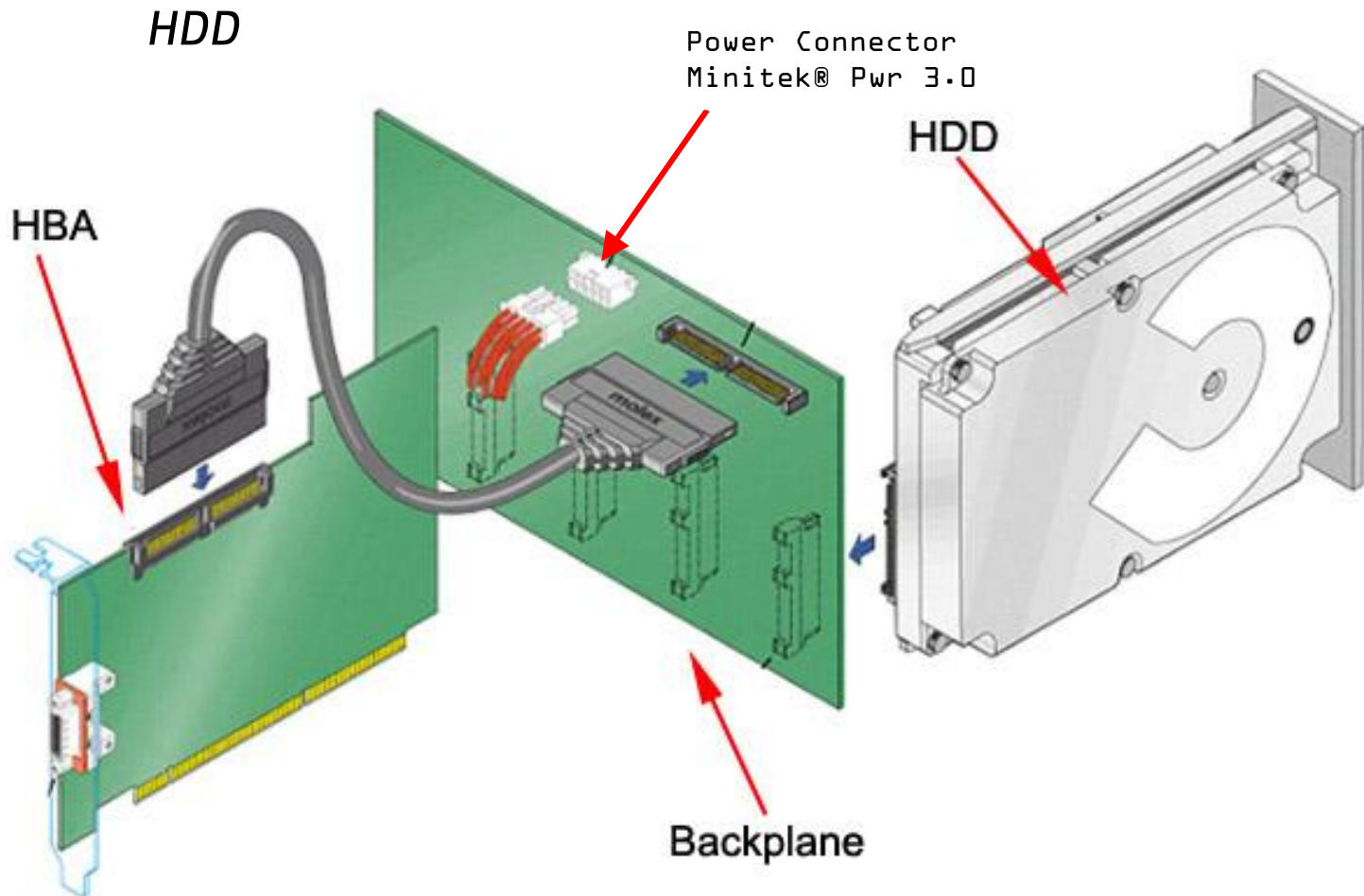
Wi-Max Box



Minitek® Pwr 3.0



Markets & Application – Data

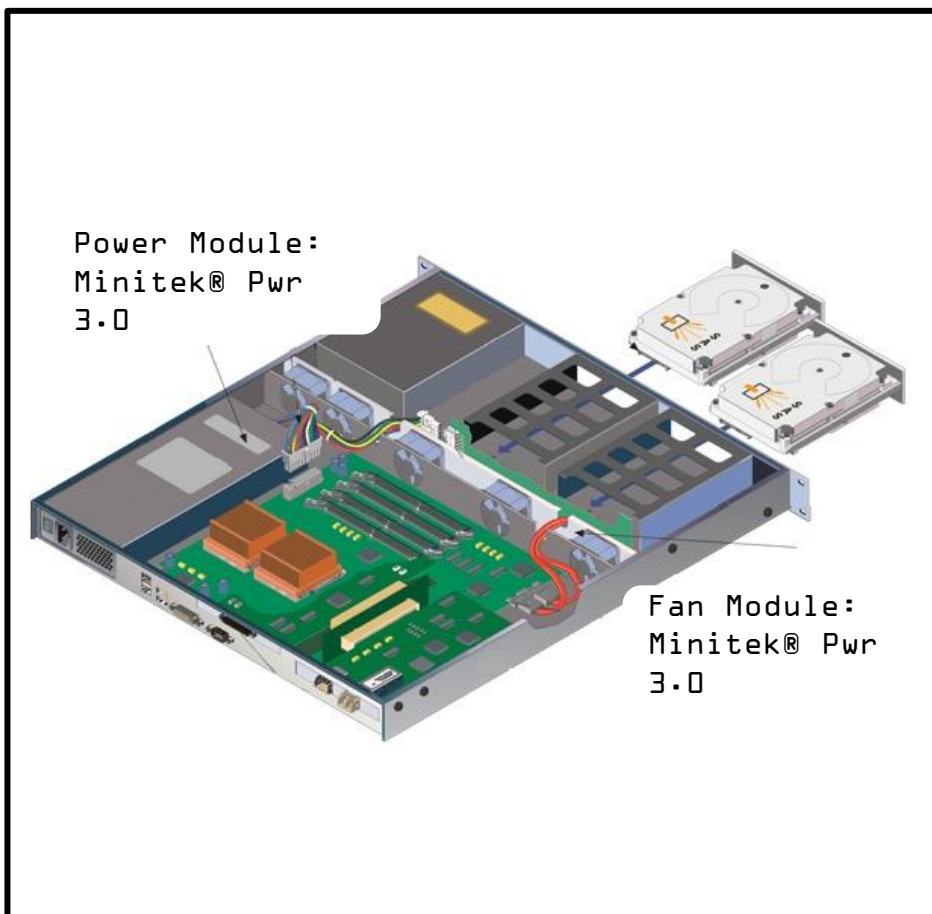


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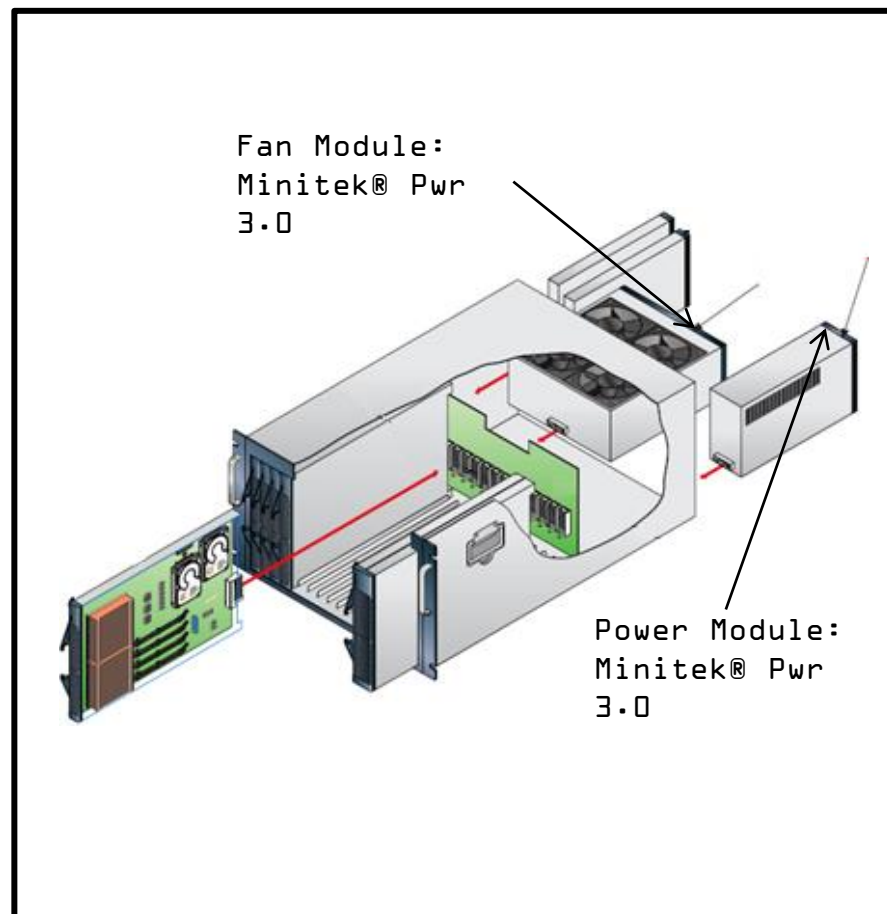
Markets & Application – Data



Rack-Mount Server



Blade Server

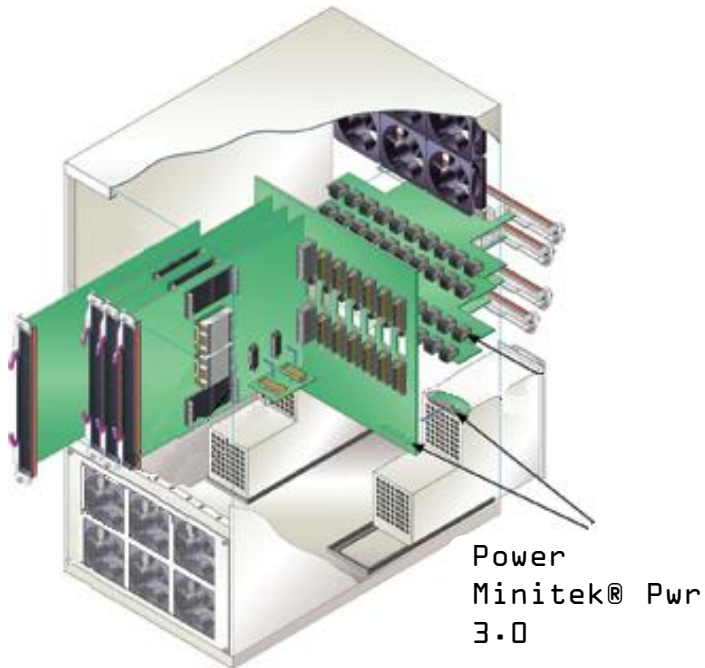


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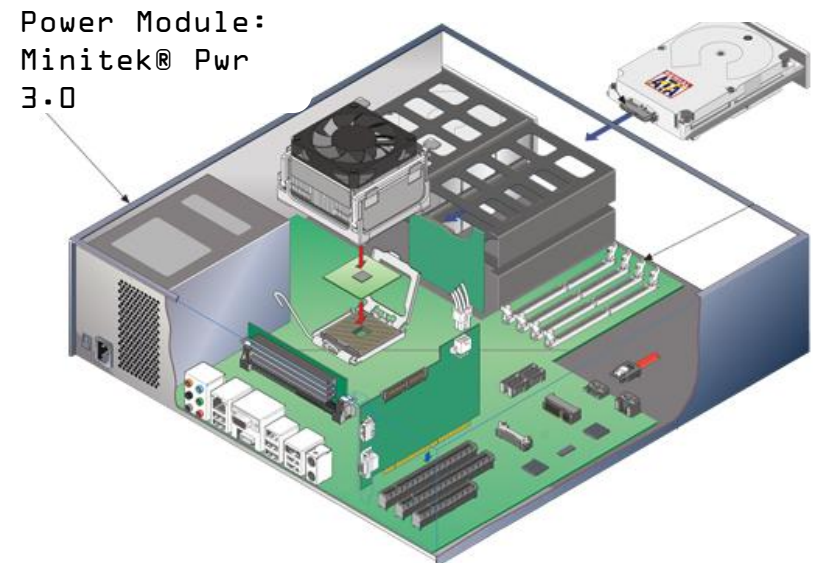


Markets & Application – Data

Server



Desktop PC and MotherBoard



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Part Numbers

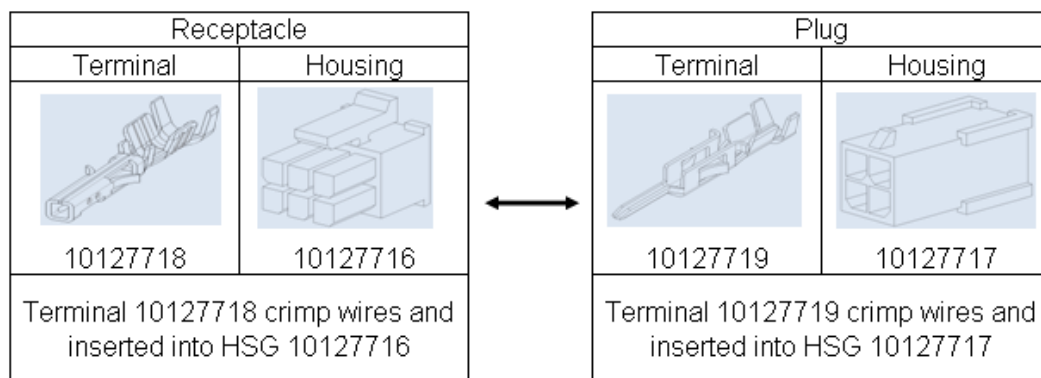
Product Description	Positions	Material	FCI P/N	Figure
PCB Header Right Angle Through Hole	#2~#24	LCP, UL94V-0, Black color Brass Terminal	10127720	
PCB Header Vertical Through Hole	#2~#24	LCP, UL94V-0, Black color Brass Terminal	10127721	
Receptacle Housing	#2~#24	NYLON 66, UL94V-0, Black	10127716	
Plug Housing	#2~#24	NYLON 66, UL94V-0, Black	10127717	
Female Terminal	-	PhBr AWG 22~28 (ØD 1.2~1.7mm)	10127718	
Male Terminal	-	PhBr AWG 22~28 (ØD 1.2~1.7mm)	10127719	

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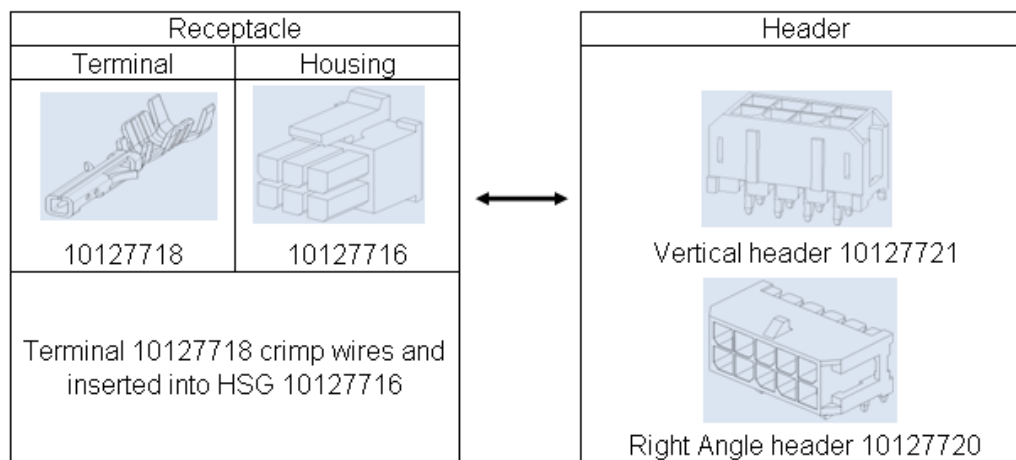


Mating

Wire-to-Wire



Wire-to-Board



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Collaterals



Available on FCI.com:

■ Technical Data Sheet



■ Part Numbers & Drawings

Narrow By [Expand](#) [Start > Minitek Pwr™ 3.0 Connectors >](#)

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Part Number	Image	Status	Product Name
10127716-04LF		PRE-RELEASED	Minitek Pwr™ 3.0 Receptacle Housing, Dual row, 4 positions Glow Wire Compatible
10127716-12LF		PRE-RELEASED	Minitek Pwr™ 3.0 Receptacle Housing, Dual row, 12 positions Glow Wire Compatible
10127716-22LF		PRE-RELEASED	Minitek Pwr™ 3.0 Receptacle Housing, Dual row, 22 positions Glow Wire Compatible
10127717-06LF		PRE-RELEASED	Minitek Pwr™ 3.0 Plug Housing, Dual row, 6 positions Glow Wire Compatible
10127717-16LF		PRE-RELEASED	Minitek Pwr™ 3.0 Plug Housing, Dual row, 16 positions Glow Wire Compatible
10127717-24LF		PRE-RELEASED	Minitek Pwr™ 3.0 Plug Housing, Dual row, 24 positions Glow Wire Compatible
10127719-001PLF		PRE-RELEASED	Minitek Pwr™ 3.0 Male Terminal, PhBr, Tin plating, Pre-plated
10127720-122LF		PRE-RELEASED	Minitek Pwr™ 3.0 header, Dual row, Right-Angle Through hole, Gold Flash plating, 12 positions, non Glow Wire Compatible
10127720-202GLF		PRE-RELEASED	Minitek Pwr™ 3.0 header, Dual row, Right-Angle Through hole, Gold Flash plating, 20 positions Glow Wire Compatible



THANK YOU

