JASPER ELECTRONICS

FEATURES

- Standard PCI Output Voltages: 5.0V, 3.3V, ±12.0V, with Variable Currents
- Hot Swap, N+1 Redundant with Internal OR-ing Diodes
- .99 Power Factor Corrected AC 90-264V Input
- Current Sharing on 5.0V, 3.3V and +12.0V Outputs
- Standard 47 Pin Connector Configurations
- Custom Configurations To Meet User Specified Requirements
- Excellent Performance, Competitively Priced
- 2 Year Warranty
- Complies With All Requirements Of PICMG Power Interface Specifications
- Fully Compliant with the EU RoHS Directive**

CONTACT

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CompactPCI® Series

300 Watt - 3U 8HP DC Input Power Supplies

(PICMG® COMPLIANT)

COMPACTPCI® SERIES FRONT VIEW

GENERAL OVERVIEW

Jasper's Compact PCI Power Supplies comply with the industry standard PICMG requirements and are available in AC or DC input, from 175W to 500W DC output.

FEATURES ON SELECT MODELS INCLUDE:

- AC/DC: 90-264VAC Input – 175, 200, 250, 300, 350, & 500 Watt Models – 3U & 6U x 8HP
- DC/DC: 18-72VDC Input – 175, 200, 250, 300, 350, & 500 Watt Models – 3U & 6U x 8HP
- PICMG 2.11 Compliant
- Active PFC
- UL/CSA, NEMKO/TUV & CE Certified
- RoHS Compliant
- Current Sharing on 3.3, 5 & +12V Rails
- Hot Swap & ORing Diodes N+1 Operation
- Standard 47 Pin Output Connector with 38 & 32 Pin Options (Some Models)
- Models can be ruggedized against high shock, vibration, and humidity to meet MIL-STD-810 requirements
- Customizing To Meet Your System Requirements Is Our Specialty

Rev B-June-14-2026

TECHNICAL SPECIFICATIONS

INPUT				
Voltage/ Current	DC 36-72V, 7.58A @48V nom., full load; 0.16A, no load			
Fusing	12.0A, 250V internal line fuse provided, non-user servicable			
Inrush Current	46.2Apk @ nom. 48V DC			
EMI Filtering	Meets EN 55022 Class A			
Efficiency	83% typical			
Redundant/ Hot Swap	Full power N+1 redundant, hot swap capable			
OUTPUT				
Voltage/Current (V/A)	**V1**	**V2**	**V3**	**V4**
Model DPCI304-1022-4	5.0/40	3.3/40	+12/10	-12/1.5
Combined output of V1+V2 not to exceed 55A. Total loading on all outputs not to exceed 300W				
Line Regulation	±0.01% typical, at the sense point over full input range, sense leads connected			
Load Regulation	±0.2 to ±1.0% typical			
Remote Sense	V1, V2, V3 outputs compensate for up to 0.25V total line drop in the load cables. Outputs are internally sensed if leads are opened			
Minimum Loading	None required in single unit applications, or with optional internal preload. For parallel operation, 2.0A minimum required on V1			
Over/ Under Shoot	None at turn-on or turn-off			
Stability	Output drift <±0.2% after 20 minute warm-up			
Temperature Coefficient	<±0.02%/ºC, 0º - 50ºC, after 20 minute warm-up			
Dynamic Response	Less than 3% deviation with a 25% load change at 1A/µsec. Output returns to within 1% in less than 300µsec.			
Ripple and Noise (PARD)	For all outputs, 50mV max or 1% peak-to-peak nominal, which ever is greater, DC to 20MHz bandwidth with a coaxial probe and 0.1µF/22µF capacitors at the output terminals			
Current Sharing/ Parallel N+1 Operation	V1, V2, V3 outputs. Single wire connection for ±10% current sharing between any number of units. Droop method current share for V4			
Hold-Up Time	Outputs remain in regulation >18msec minimum following loss of AC power at low line, full load			
Over Current/ Short Circuit Protection	Current limit on all outputs, 105-130% max load typical. Automatic recovery when overload is removed			
Over Temperature Protection	Internal temperature sensing. Causes all outputs to shut down. Automatic recovery			
Under Voltage Warning	Any output dropping below 10% of nominal triggers the power fail warning signal			
Over Voltage Protection	Non-crowbar type. Any output that exceeds 25% ±10% of nominal Vout will cause all outputs to latch off. Remote inhibit, enable or input recycle required to reset			
SIGNALS, INDICATORS AND CONTROLS				
Remote Enable	Enabled by closed circuit or TTL logic 0. Disabled by open circuit or TTL logic 1			
Remote Inhibit	Enabled by open circuit or TTL logic 1. Disabled by closed circuit or TTL logic 0			
Power Fail Warning	A low TTL compatible PF signal triggered by an under voltage condition on V1 or V2 output			
LED Indicator	Dual uni-color LEDs on the front panel. Input: Green indicates input power ON and outputs within regulation. Fault: Amber indicates an output power fault. OFF for normal operation or remote output inhibit enabled.			
MECHANICAL				
Outline	3U x 8HP x 160mm Eurocard. Refer to JE Outline Dwg 02102-000 or the Mechanical Outline in this catalog. Complies with all current PICMG® CompactPCI specifications			
Power Density	7.7 Watts/Cubic Inch			
Weight	Approx: 1.47 lbs / 666.0 gs.			

**Specifications subject to change without notice.*

Retaining Latches	Supplied with a single Rittal #3686.135 Type VII (Telecom) Lower Latch. Other manufacturers and types available. Consult factory
Guide Rails	Supplied with .260[6.61] offset guide rails for use with Rittal 3687.832 (or equivalent) PSU guides
Front Panel Overlay	Supplied with Lexan overlay and JE Logo. May be deleted, or supplied with customer specified logo or other information. Consult factory
OPERATING ENVIRONMENT	
Operating Temperature	0º – 50ºC ambient at full load, with specified airflow
Cooling	A minimum of 500lfm direct forward airflow required to achieve full rated power and specified MTBF. Consult factory for derating guidelines with reduced or reversed airflow
Relative Humidity	Up to 90% RH, non-condensing
Operational Vibration	2.0G peak, 5 – 500Hz along three orthogonal axis
Storage Temperature	-40º to 85ºC
Altitude	Operating to 10,000 ft; Storage to 30,000 ft.
MTBF	Designed for 150,000 hrs at 25ºC
INTERCONNECT	
I/O Connectors. Request JE Outline Configuration Drawing #02102-000 or refer to the chart in this catalog for pin function identification	
47 Circuit	Positronic Ind. P/N PCIH47M400A1. Mates with PI P/N PCIH47F300A1
Note: Use of the specified mating connector is required to insure proper "make/break" sequential contact sequence	
SAFETY	
Recognized to U.S. and Canadian Bi-National Standard UL 60950-1, 1st. Ed., 2007, and CSA C22.2 No. 60950-1-03, 2007 (cULus Mark); TUV certified to EN60950 Ed. 1 (2007). CE Marked	

**Specifications subject to change without notice.*

47 PIN DIN I/O CONNECTOR FUNCTIONS

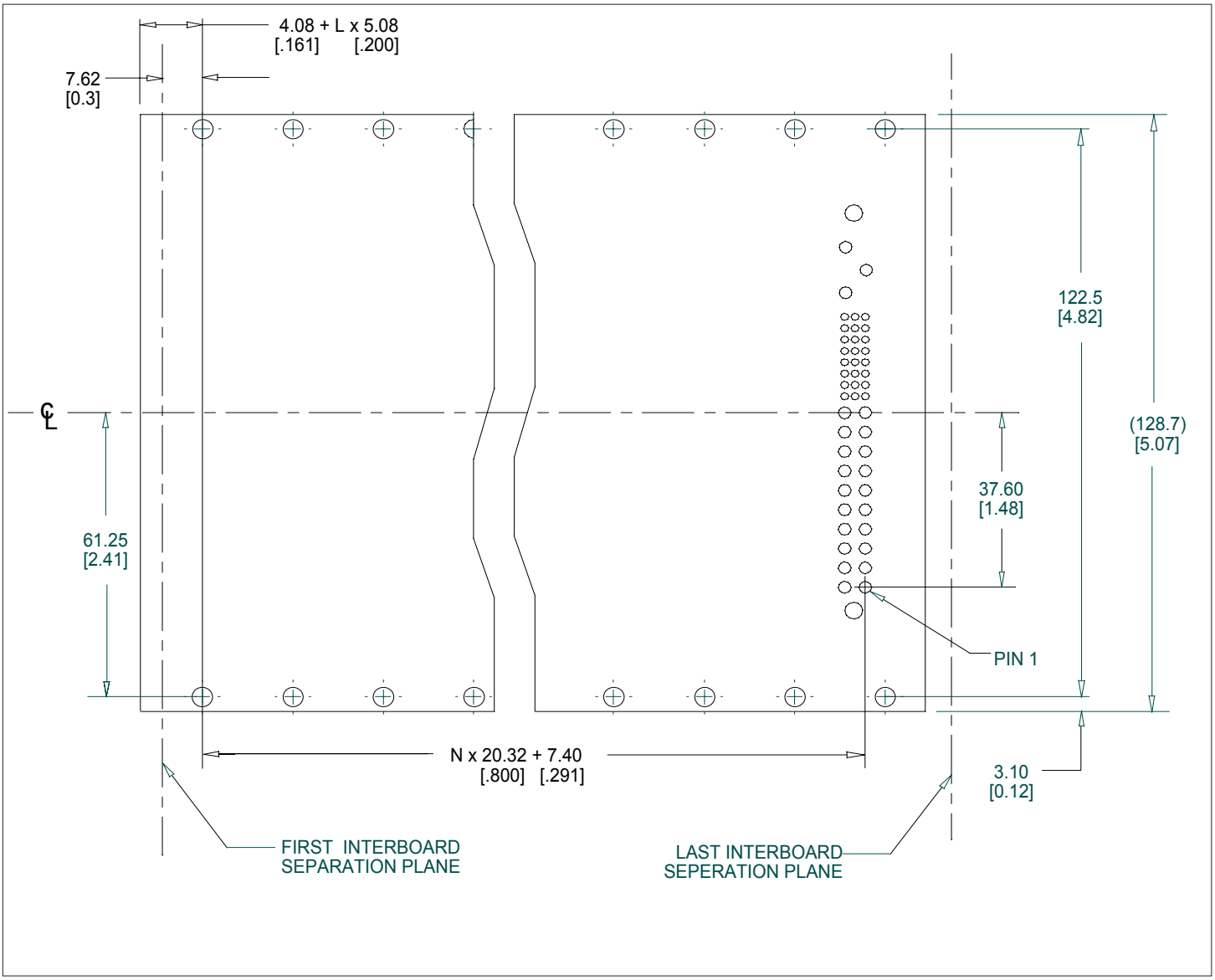
PIN#	SEQ(1)	FUNCTION	
01-04	2	+5.0V	v1 Ouput
05-12	2	GND	V1+V2 Return
13-18	2	+3.3V	V2 Output
19	2	GND	V3 Return
20	2	+12.0V	V3 Output
21	2	-12.0V	V4 Output
22	2	RTN	Signal Return
23	2	N.C	No Connection (Reserved)
24	2	GND	V4 Return
25,26	2	N/C	No Connection (Reserved)
27	**3**	R/EN	Remote Enable. Closed Circuit to GND
28,29	2	N/C	No Connection (Reserved)
30	2	+S1	+5.0V (V1) Remote Sense
31,32	2	N/C	No Connection (Reserved)
33	2	+S2	+3.3V (V2) Remote Sense
34	2	S+RTN	Sense Return for V1, V2, V3
35	**3**	ISHR-1	+5.0V(V1) Current Share (Option C)
36	2	+S3	+12.0V (V3) Remote Sense
37	2	N/C	No Connection (Reserved)
38	2	DEG	Thermal Degrade Signal
39	2	R/INH	Remote Inhibit, Close circuit to GND
40	2	N/C	No Connection (Reserved)

41	**3**	ISHR-2	+3.3V (V3) Current Share (Option C)
42	2	PF	Power Fail Signal
43	2	N/C	No Connection (Reserved)
44	**3**	ISHR-3	+12.0V (V3) Current Share (Option C)
45	**1**	PF	Protective Earth (chassis) Ground
46	2	Input Power	PCI: Neutral (N) ACC Power Input DPCI: +DC
47	2	Input Power	PCI: Line (L) AC Power Input DPCI: -DC
*(1) Contact mating sequence. 1= First to make/ last to break			

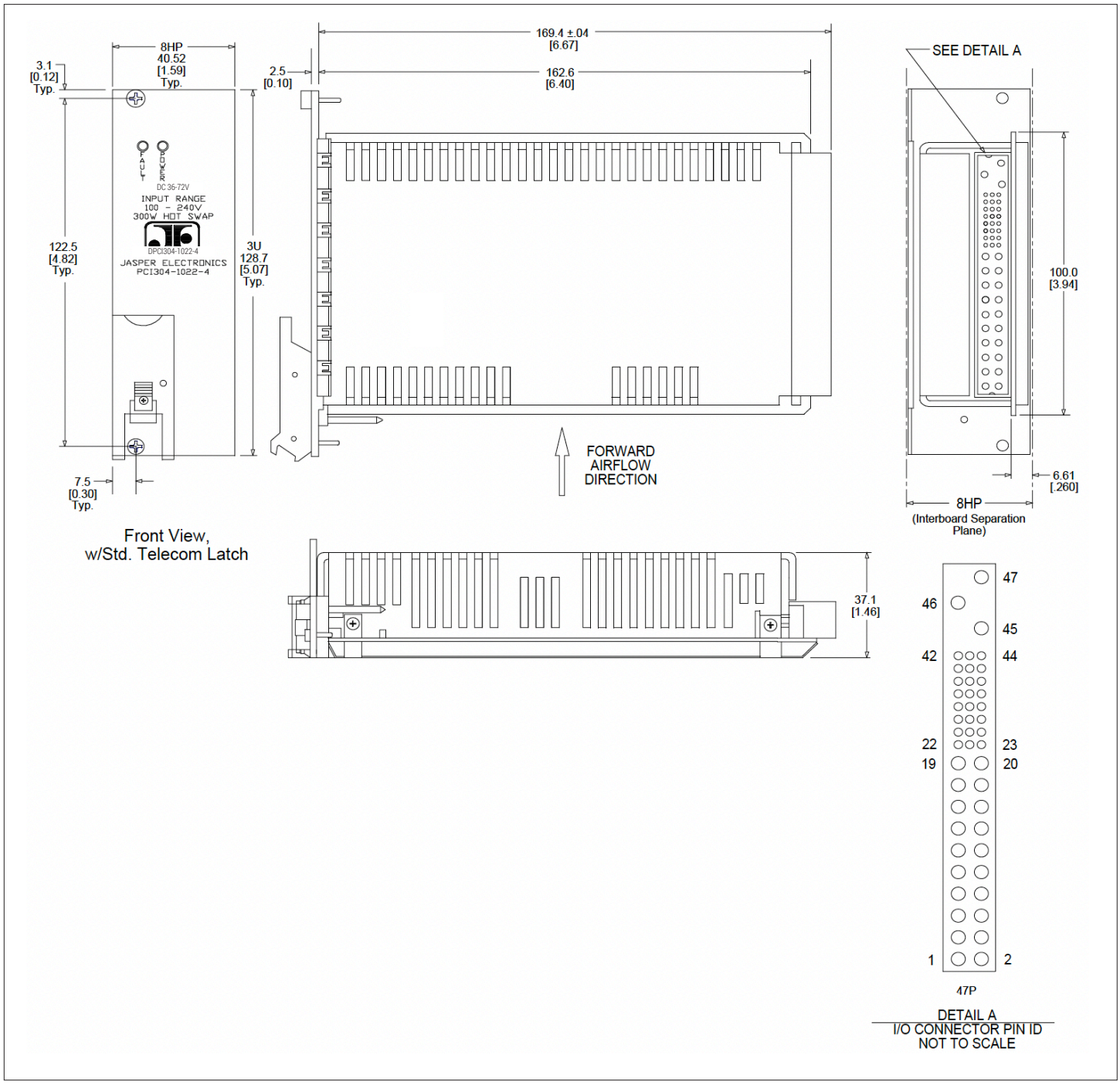
CONFIGURATION OPTIONS

OPTION	CODE
(1) Connector Type	4 = 47 pin (PICMG standard);
(2) Latch Type	S = Standard Telecom Type VII; O = Optional Type IV; N = None provided
(3) Overlay	S = Standard (JE Logo, model designation, etc); B = Blank (No logo, model designation, etc); N = No overlay provided; NN = No overlay; in addition, the front panel including the EMI strip is also deleted. For user provided panel or custom enclosure applications. Note: Removal of the panel does not violate safety enclosure requirements or integrity. Contact the factory for panel fastener type, max penetration depth and location information. *M = Custom overlay – User specified. May require a factory assigned custom model code. *(* - Additional cost. Consult factory.)*
(4) Custom Configuration	M = Modified, followed by a factory assigned 4-digit number to identify a user specified configuration. Such models may include special or non-standard features and/or options, or be in a configuration differing sufficiently from the design of the approved similar standard model from which it is derived to require re-evaluation of all or part of the design to insure continuing compliance with all safety requirements. Option codes 2,3 may not be present in the model description as these requirements are generally included in the user specifi-cation documentation on file with the factory. Consult the factory for exact requirements. *(May incur additional cost. Consult factory.)*
(5) RoHS Compliant	G = Jasper products that are fully compliant with the requirements of Directive 2002/95/EC Restrictions of Hazardous Substances (RoHS) are identified with the letter code "G" in the JE part number and model description on the unit labels and related documents (sales orders, etc). All materials, processes and packaging used in the assembly and shipping of this product comply. Examples: PCI304-1022-4-SSG PCI304-1022-4-M4662 G

BACKPLANE CONNECTOR LOCATIONS, VIEWED FROM THE FRONT OF THE ENCLOSURE



COMPACTPCI® OUTLINE DRAWING



LIMITED WARRANTY POLICY

All Jasper Electronics (JE) standard model power supplies and products are guaranteed to be free of defects in workmanship and materials for a minimum of two (2) years from the date of original shipment, when operated within specification. Non-standard (custom) power supplies and products may be warranted on an individual basis. The unused portion of this warranty is fully transferable with the original equipment in which the power supply is installed. Please see our website for full warranty statement.

Jasper Electronics

INNOVATIVE SPECIALTY DC POWER SYSTEMS

Standard and Custom Power Supplies from 5W to 10KW

TRAFFIC CONTROL POWER SUPPLIES

- 70-400+ Watts / 120 and 220 VAC Models Available
- CALTRANS TEES, NYSDOT, CDOT, GDOT Compliant for 332, 334, 336, 342, 344, and 346 Series cabinets
- RoHS and NEMA Compliant
- Custom labeling and barcoding available
- Ruggedization against shock / vibration / humidity available

CUSTOM POWER DISTRIBUTION ASSEMBLIES (PDAs)

- Compliant with TEES 2020
- 1U smaller than the PDA2-LX and PDA3-LX
- User accessible slots as specified
- Custom labeling and barcoding available
- Ruggedization against shock / vibration / humidity available

COMPACT PCI

- AC or DC input, 175W - 500W DC output, active PFC
- 3U x 8HP, 6U x 8HP sizes
- PICMG 2.11 compliant, UL/CSA, NEMKO/TUV/CE certified, ROHS compliant
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Industrial Computing, Military, Satellite Comm, Test, Transportation, Telecom, Aerospace

SPECIALTY HOT-SWAPPABLE POWER SUPPLIES

- 200-1500W, Universal Input, 5-54VDC Output
- Hot Swap. N+1, 90+% Efficiency
- 1U Form Factors
- 30+ Variations for Various Applications Including Nuclear
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Medical Equipment, Military, Test, Automotive, Computing, Audio, Sensitive Electronics

RACK POWER SYSTEMS

- 200W-1500W, 2-8 slots, single or mixed output voltages, up to 10KW total
- Single, dual, or individual unit AC or DC input
- Internally or externally redundant DC outputs
- Standard 19" and 23" size or user-specified configurations also available
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Medical Equipment, Military, Test, Automotive, Computing, Audio, Sensitive Electronics

CUSTOMS & MODIFIED STANDARDS

- 75W-2KW
- Single to 7 outputs
- Designed and built to custom or semi-custom specifications
- Ruggedization against shock/ vibration/ humidity optional
- Custom electrical specs, chassis, paint, labeling, connectors, interface all available

Primary Applications: Medical Equipment, Military, Test, Automotive, Computing, Audio, Sensitive Electronics

LOW NOISE CONVECTION / CONDUCTION COOLED POWER SUPPLIES

- 200W-500W, 90—264VAC full range input with 12-54 VDC Output
- Wide operating temperature range / high efficiency
- Small form factors
- Ruggedization against shock/ vibration/ humidity optional

Primary Applications: Medical Equipment, Military, IT, Sensitive Electronics

MEDICAL ADAPTERS

- 6W-250W, Efficiency levels V & VI
- Desktop, Wall-mount, and Interchangeable AC plug types
- Large selection of output connectors – additional cable lengths available
- UL60601 (medical) approved adapters available
- Ruggedization against shock/ vibration/ humidity optional

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