

**JASPER  
ELECTRONICS**

*Innovative Specialty  
DC Power Systems*

# Universal Input Harmonic Correction (PFC) AC / DC Medical & ITE Application External Desktop Switching Adapter

**200-250 Watts Green Power Single Output**



## GENERAL OVERVIEW

Jasper's External Power Supplies are available from 5W-150W, with single and multiple outputs. Fixed and detachable I/O cords are available, as are Standard and Custom configuration models. Please feel free to contact us for any further information about your application so we can offer a solution!

## FEATURES INCLUDE:

- Accomodate Universal AC Input
- No Load Power Consumption < 0.5W
- Meet Medical Standards IEC60601-1 & ITE Standards IEC60950-1
- EMI Meet EN 55011 & EN55022 Class B
- International Efficiency Level V & CEC Compliant
- CE Marking Compliance



## CONTACT

1580 No. Kellogg Dr.  
Anaheim, California, 92807

(714) 917-0749

[www.jasperelectronics.com](http://www.jasperelectronics.com)  
[sales@jasperelectronics.com](mailto:sales@jasperelectronics.com)



ISO9001:2015

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INPUT SPECIFICATIONS	
Input Voltage	Typical 90-264VAC with PFC
Power Factor & Harmonic Correction	Meet IEC61000-3-2, PF typical 0.96-0.99 at full load
Input Connector	3 Pole AC inlet IEC320-C14(DT7)/
Input Frequency	47-63Hz
Inrush Current	15.8A at 230VAC
Input Current	Typical 1.95A at 115VAC, Typical 1.05A at 230VAC
Dielectric Withstand	Meet IEC60601-1 & IEC60950-1
EMI	Meet EN55011 & EN55022 FCC Class B
Hold-Up Time	Typical 25mS at 115VAC and 230VAC
Over Temperature Protection	Installed by NTC
Earth Leakage Current	Less than 0.3 mA
No Load Power	Less than 0.5W at 230VAC
OUTPUT SPECIFICATIONS	
Output Voltage	See Ratings Chart
Output Current	See Ratings Chart
Output Wattage	200-250 Watts (See Input Voltage Derating)
Output Connector & Cord	Optional
Line Regulation	Typical 0.1%
Load Regulation	Typical $\pm 3\%$
Noise & Ripple	Typical 1% peak to peak
OVP	Built-in by latch circuit
Adjustability	Not Available
Overload Protection (OLP)	Fully protected against output overload and short circuit. OLP set at about 110-150% rating output wattage. Consult the factory for OLP setting.
GENERAL SPECIFICATIONS	
Efficiency	Typical 88-94% (various with the output voltage)
Switching Frequency	85-100 KHz
Circuit Topology	Half-Bridge ZVS Circuit
Transient Response	Output voltage returns in less than 1mS following a 25% load change
Safety Standard	Meet Medical standards IEC60601-1 & ITC IEC60950-1 Class I
Operating Temperature	-25°C to +40°C
Cooling	Free air convection
Storage Temperature	-30°C to +85°C
Construction	Impact resistant plastic enclosure case
Power Density	3.62-4.54 Watt / Cubic Inch.
Weight	1216.5g (42.91oz)

*\*Specifications subject to change without notice.*

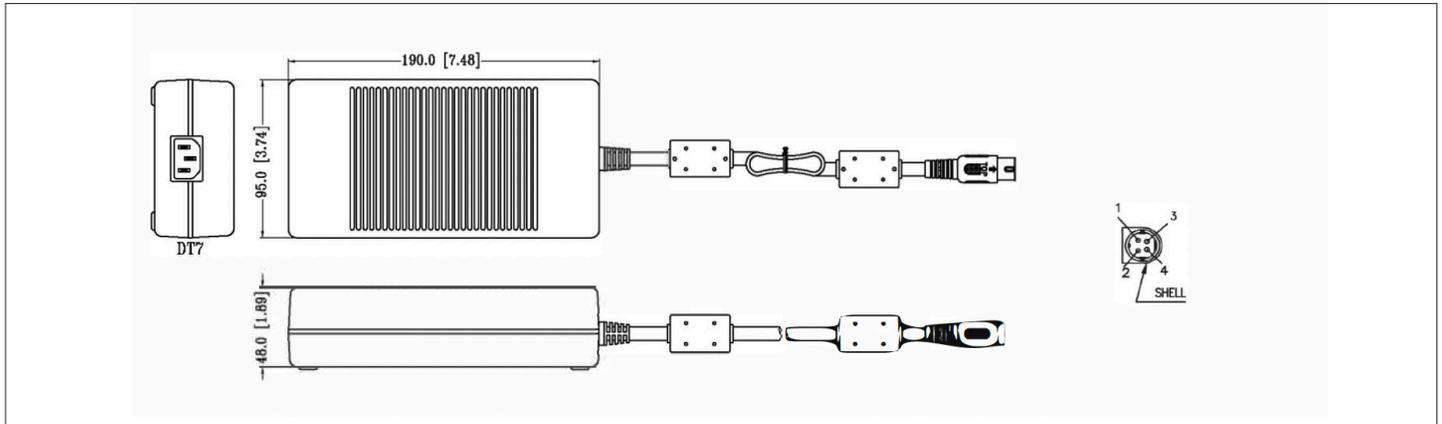
**Note:**

1. All measurements are at nominal input, full load, and +25°C unless otherwise specified.
2. Load regulation is measured at 115VAC or 230VAC in percentage to indicate the change in output voltage as the load varied from half load to full load ( $\pm\%$ ).
3. The exact obtainable load regulation depends upon the output cord selected and load current.
4. Due to requests in market and advances in technology, specifications subject to change without notice.

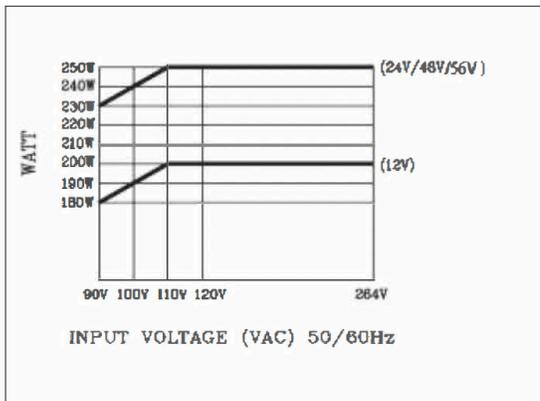
## MODEL CHART

Model Number	AC Inlet	O/P Voltage	O/P Current		
			Typical	Max.	Peak
HEMP252G-2-1670	IEC320-C14 (DT7)	12.0VDC	16.7A	16.7A	20.0A
HEMP252G-5-1040	IEC320-C14 (DT7)	24.0VDC	10.4A	10.4A	12.0A
HEMP252G-8-5200	IEC320-C14 (DT7)	48.0VDC	5.2A	5.2A	6.0A
HEMP252G-(56)-4500	IEC320-C14 (DT7)	56.0VDC	4.5A	4.5A	5.0A

## MECHANICAL DRAWING



## INPUT VOLTAGE DERATING



## PIN ASSIGNMENT

PIN NO.	PIN OUT.
Pin #1	VO1
Pin #2	DC Com.
Pin #3	DC Com.
Pin #4	+VO1

# 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

