

**JASPER  
ELECTRONICS**

*Innovative Specialty  
DC Power Systems*

# MD310 Series Medical Desktop Type

230-310W Max



## GENERAL OVERVIEW

Jasper's Medical Power Supplies are available from 4.5W-310W, with both fixed and detachable I/O cords options. Standard and Custom configuration Medical IEC Adapters are also available. Please see below for specifications and available options.

## FEATURES INCLUDE:

- Active PFC Function
- DoE Compliance
- RoHS Compliance
- Over Voltage Protective Installation
- Over Current Protective Installation
- Over Temperature Protective Installation
- Short Circuit Protective Installation
- LED Indication
- MTBF > 50,000 Hours

## MD310-x Y-vv PP

x: Inlet Type: 1. C14 2. C8 3. C6 6. C18

Y: Output Range (see table below, select letters A-Q)

vv: Specified Output Voltage, ie 24 is 24VDC

PP: Connector Type, ie 01 for Jasper standard DC cable or please refer to the appendix page

## CONTACT

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ISO9001:2015



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MODEL CHART							
Model Number	Max Output Power (W)	Output Voltage (Vo)	Min Load (Io)	Max Load (Io)	Load Regulation	Line Regulation	Ripple & Noise
MD310-xA	230 W	12-18V	0A	13.33A	±5%	±1%	240mV
MD310-xB	240 W	12-18V	0A	20.00A	±5%	±1%	240mV
MD310-xC	250.2 W	12-18V	0A	20.85A	±5%	±1%	240mV
MD310-xD	260 W	19-28V	0A	13.68A	±5%	±1%	360mV
MD310-xE	270 W	19-28V	0A	14.21A	±5%	±1%	360mV
MD310-xF	270 W	32-42V	0A	8.43A	±5%	±1%	630mV
MD310-xG	270 W	44-56V	0A	6.13A	±5%	±1%	840mV
MD310-xH	280 W	19-28V	0A	14.73A	±5%	±1%	360mV
MD310-xM	290 W	19-28V	0A	15.26A	±5%	±1%	360mV
MD310-xN	300 W	19-28V	0A	15.78A	±5%	±1%	360mV
MD310-xP	310 W	32-42V	0A	9.68A	±5%	±1%	630mV
MD310-xQ	310 W	44-56V	0A	7.04A	±5%	±1%	840mV

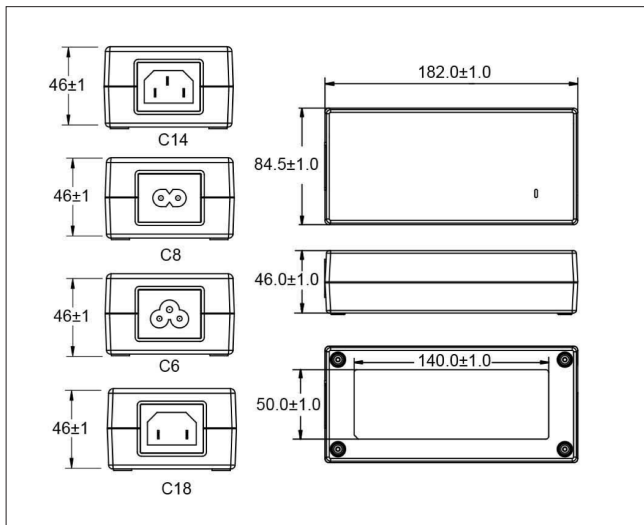
**Note:**

1. Ripple & Noise is measured by using 20MHz bandwidth limited oscilloscope and terminated each output with a 0.1 uf ceramic capacitor & parallel with 47uF aluminum capacitor at full load and nominal line.
2. Line regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
3. Max. Output Power (W)  $\geq V_o \times I_o$

INPUT SPECIFICATIONS	
Input Range	100-240VAC
Frequency	50-60Hz
Input Current	5A to 2.5A
Inrush Current	$\leq 150A$ at Cold Start,
Efficiency	Meet CEC Level V, VI (DoE)
Hold-Up Time	8.3mS
Turn On Time	$\leq 3S$
OUTPUT SPECIFICATIONS	
Over Voltage Protection	Latch Mode
Short Circuit Protection	Auto Recovery
Over Current Protection	Auto Recovery
Over Temperature Protection	Latch Mode
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	0 to 40°C
Storage Temperature	-20°C to 85°C
Storage Humidity	5% to 95%
SAFETY	
UL/cUL, UL60601, TUV EN60601, CB 60601, CE, FCC	

*\*Specifications subject to change without notice.*

## MECHANICAL DRAWING



Case Size: 197.7L x 102W x 51H (mm)

AC Inlet: C14, C8, C6, C18

Weight: 1350g

# 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

