

# SMD175-24 Medical Power Supply 150 to 175 Watts

<b>Max. Output Power</b>	<b>200 watts</b>
<b>Output Channels</b>	<b>Single Output</b>
<b>Input Mains Voltage</b>	<b>85 to 264VAC</b>



## STANDARD FEATURES

- Over voltage, over current & over temperature protection
- Compact size 4.5"W x 7.0"L x 1.7"H
- Power factor corrected to 0.99pf
- 12 volt Vdc, 250 mA fan output
- Medical Approved to UL2601, IEC601-1 and CSA 22.2 No. 601.1

## ENVIRONMENTAL

Operating temperature: 0°C to 50°C derate output power at 2.5% per degree from 50° to 70°C

Storage temperature: -40°C to 85°C

Temperature coefficient: ± 0.03% per °C

EMI compliance to CISPR 11 Class B

Humidity: Operating; non-condensing 0% to 95%

MTBF calculated >296,000 hours at full load 25°C ambient conditions per MIL-HDBK-217F, Notice 2

## ELECTRICAL SPECIFICATIONS

### Input

Input range .....85 to 264VAC  
 Frequency .....47 to 63Hz  
 Leakage current .....Less than 135µA @132VAC and maximum 270µA @264VAC. Lower leakage models optional. Contact factory for option code  
 Inrush current .....37A maximum @ 240VAC under cold start @ 25°C  
 Efficiency .....75% typical at full load  
 EMI filter .....CISPR 11 Class "B", FCC Class "B", EN55011 Class B  
 Power factor .....0.99 typical

### Output

Maximum power.....175 watts with 150 LFM min. of customer provided cooling. 200 watts max. with optional fan cover (suffix "-C").  
 Hold-up time.....20 ms @ 200 W load, nominal line (115VAC)  
 Overload protection .....Fully protected against short circuit and output overload. Automatic recovery  
 Overvoltage protection .....10% to 25% above nominal output

### Logic Control

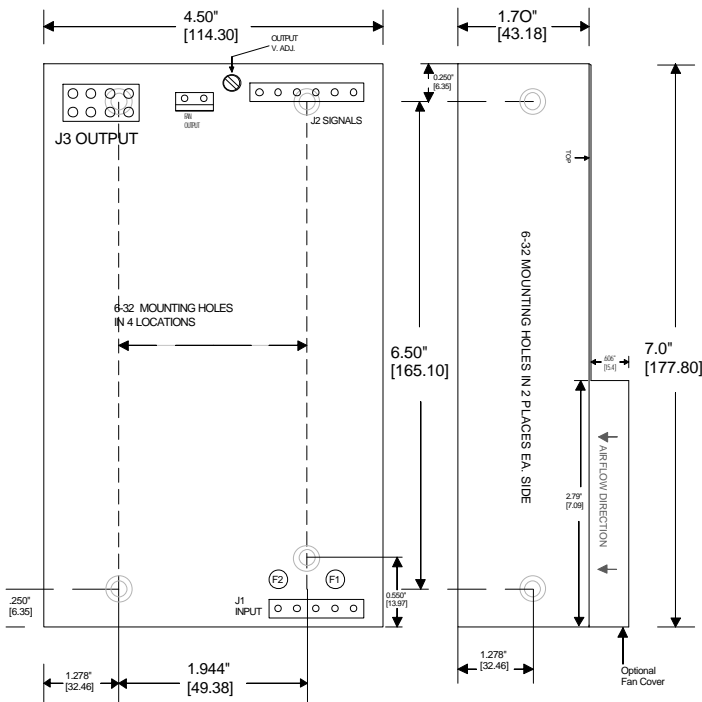
Power failure .....TTL active high, goes low 5 msec before loss of regulation  
 External/off ..... A logic low shuts down the power converter  
 DC OK .....DC  
 OK .....TTL active high @ 90%of output regulation.  
 Remote sense .....Compensates for 0.5 V lead drop min. Will operate without remote sense connected.

**EAGLE SERIES ORDERING INFORMATION**

Model Number	Output Voltage	Maximum Current <sup>1</sup>	Maximum Current <sup>2</sup>	Typical Regulation	Ripple P/P (PARD) <sup>3</sup>	Voltage Adjust
SMD175-12	12V	16.50A	12.5A	± 1%	120 mV	± 5%
SMD175-15	15V	13.3A	10A	± 1%	150 mV	± 5%
SMD175-24	24V	8.3A	6.2A	± 1%	240 mV	± 5%
SMD175-28	28V	7.2A	5.3A	± 1%	280 mV	± 5%
SMD175-30	30V	6.6A	5.0A	± 1%	300 mV	± 5%
SMD175-36	36V	5.5A	4.2A	± 1%	360 mV	± 5%
SMD175-48	48V	4.2A	3.2A	± 1%	480 mV	± 5%

1. Maximum continuous rating with 150LFM of directed airflow or with optional fan cover (suffix "-C")
2. Unrestricted convection cooling
3. Measured with 20MHz bandwidth at nominal line full load

**MECHANICAL**



**NOTES**

- a. Other output voltages available upon request. Contact CDI Sales
- b. Specifications subject to change without notice
- c. All dimensions in inches, tolerance is ±.02"
- d. Specifications are at factory settings
- e. Mounting maximum insertion depth is 0.12"
- f. Warranty: 1 year

**I/O CONNECTORS**

AC INPUT (J1) MOLEX PCB HEADER p/n 39-30-2056	
PIN #	REFERENCE
1	AC GROUND
2	N/C
3	AC NEUTRAL
4	N/C
5	AC LINE
MATING CONNECTOR MOLEX P/N	
HOUSING 39-01-4051 CONTACTS 39-00-0164	
OUTPUT (J3) MOLEX PCB HEADER p/n 39-29-9085	
PINS	REFERENCE
3,4,7,8	VOUT +
1,2,5,6	RETURN
MATING CONNECTOR MOLEX P/N	
HOUSING 39-01-2080 CONTACTS 39-00-0163	
SIGNALS INTERFACE (J2) AMP 641215-6	
PIN	REFERENCE
1	INHIBIT
2	+ SENSE
3	POWER GOOD
4	- SENSE
5	COMMON
6	POWER FAIL
MATING CONNECTOR AMP P/N	
HOUSING 770602-6 CONTACTS 770666-6	
FAN CONNECTOR (J4) AMP 641215-2	
PIN	REFERENCE
1	FAN OUTPUT -
2	FAN OUTPUT +(12V)
MATING CONNECTOR AMP P/N	
HOUSING 770602-2 CONTACTS 770666-02	