

# SMD275-24 Medical Power Supply 275 to 300 Watts

<b>Max. Output Power</b>	<b>300 watts</b>
<b>Output Channels</b>	<b>Single Output</b>
<b>Input Mains Voltage</b>	<b>85 to 264VAC</b>



## STANDARD FEATURES

- 4.5 watts/cu.in. power density
- Compact size 5.0"W x 7.5"L x 1.75"H
- Power factor corrected to IEC 1000-3-2
- 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 >227,000 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.....275 watts with 150 LFM min. of customer provided cooling. 300 watts max. with optional fan cover (suffix "-C").  
 Hold-up time.....20 ms @ 275 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. Latches off. Recycling AC power will reset the latch.

### 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 .....TTL active high @ 90%of output regulation.  
 Remote sense .....Compensates for 0.5 V lead drop min. Will operate without remote sense connected.

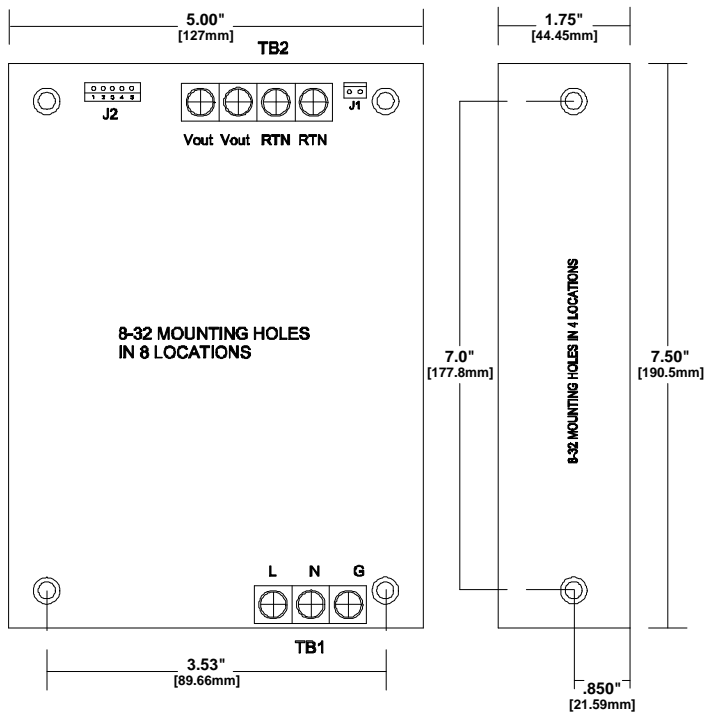
**EAGLE SERIES ORDERING INFORMATION**

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
SMD275-12	12V	23.0A	25A	± 1%	120 mV	± 5%
SMD275-15	15V	18.3A	20A	± 1%	150 mV	± 5%
SMD275-24	24V	11.5A	12.5A	± 1%	240 mV	± 5%
SMD275-28	28V	9.8A	10.7A	± 1%	280 mV	± 5%
SMD275-30	30V	9.2A	10A	± 1%	300 mV	± 5%
SMD275-36	36V	7.7A	8.3A	± 1%	360 mV	± 5%
SMD275-48	48V	5.7A	6.25A	± 1%	480 mV	± 5%

Notes:

- 1) Maximum continuous rating with 150LFM of directed airflow
- 2) Option fan cover required (suffix "-C")
- 3) Measured with 20MHz bandwidth at nominal line full load

**MECHANICAL**



**I/O CONNECTORS**

**AC POWER INPUT (TB1)**

TERMINAL #	REFERENCE
1	AC LINE
2	AC NEUTRAL
3	AC GROUND

NOTE: 6-32, 3 Pin Terminal Block

**DC OUTPUT POWER (TB2)**

TERMINAL #	REFERENCE
1	VOUT +
2	VOUT +
3	RETURN
4	RETURN

NOTE: 6-32, 4 Pin Terminal Block

**SIGNAL INTERFACE (J2)**

Connector type AMP 640456-5  
Mating connector AMP 640440-5

TERMINAL #	REFERENCE
1	DC GOOD
2	POWER FAIL
3	EXT OFF
4	SENSE +
5	SENSE -

**FAN CONNECTOR (J1)**

Connector type AMP 640456-2  
Mating connector AMP 640440-2

TERMINAL #	SIGNAL NAME
1	FAN OUTPUT -
2	FAN OUTPUT +

**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
- g. Weight: 2.2 lb / 1.0 kg