

Open Frame Type Switching Power Supply

280Watts Medical and ITE
Enclosed Single Output

FEATURES

- Both ITE & Medical Approvals.
- High Power density, 280W in 5" x 3.3" footprint.
- Medical applications Protection: Means of Patient Protection (MOPP).
- Altitude during operation: ITE up to 5000m ,Medical Below 3000m.
- Main output and Standby output Power ON LED indicators.
- 3 years warranty.



ELECTRICAL SPECIFICATIONS

- Input range : 90 - 264VAC (Refer to derating curve).
- Frequency : 47 - 63Hz.
- Power Factor : > 0.95 @115VAC; > 0.90 @230VAC @full load.
- Inrush current : <30A peak @115VAC; <60A peak @230VAC cold start @25°C.
- Input current (rms) : 3.5A @115VAC; 2A @230VAC max.
- Efficiency : > 91% typical @full load, 230VAC.
- leakage current < 100uA @264VAC.
- Maximum output power : 280Watts forced air, 200Watts convection cooling.
- Hold-up time : > 10ms typical @full load, 115VAC.
- Short circuit protection : Auto-recovery.
- Over load protection : 105% to 150% maximum rating, Auto-recovery.
- Over voltage protection : Latching type. AC Recycle.
- 5Vsb meet ErP 0.5W @ No load.
- Remote control (Inhibit) function.

RoHS compliant

Dimension : L127 xW83.2 xH40mm (5" x 3.28" x 1.58"
Weight : 0.50 kgs. (1.11lbs.)

SAFETY STANDARDS

UL60601-1 3.1rd Edition
UL/c-UL UL60950-1
EN60601-1 3.1rd Edition
TUV EN60950-1
IEC EN60601-1 3.1rd Edition
CB IEC 60950-1

EMC STANDARDS

EN60601-1-2
EN55024
EN55011 Class B
EN55032 Class B
FCC Part 15 Class B
FCC Part 18 Class B
CE

ENVIRONMENTAL

- Operating temperature : -20°C to +70°C (Refer to derating curve).
- Storage temperature: -20°C to +85°C.
- Humidity: Non-condensing 0% to 90%.
- MTBF : > 250,000 hours @full load and 25°C ambient temperature per Telcordia(Bellcore).

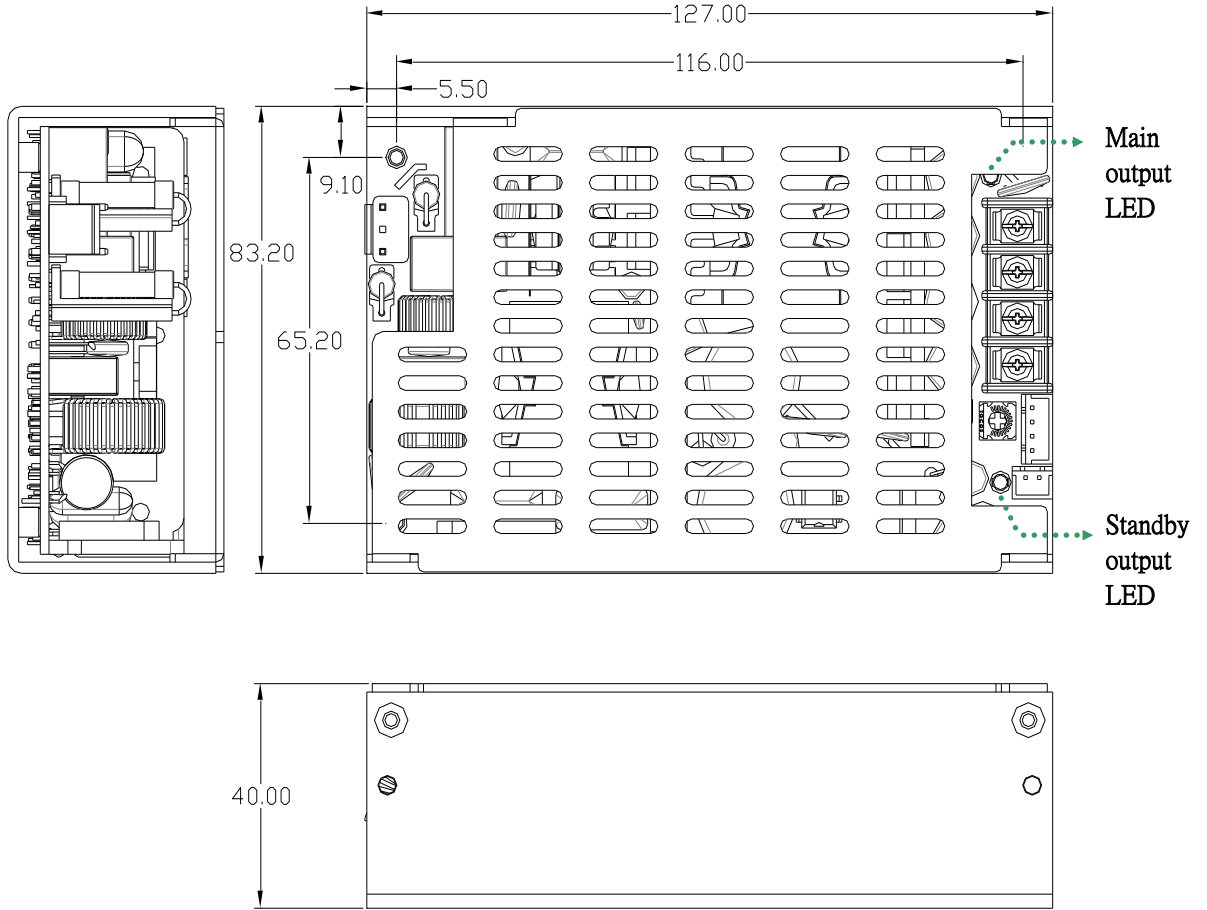
DC OUTPUT & FEATURES

Model No. (Note 1.)	Output Voltage (V1)	Maximum Load (V1)		Output Regulation (V1)	Ripple Noise (V1)	Standby supply (V2)	FAN output (V3)	Convection total power	18CFM Forced air total power
		Convection	18 CFM Forced Air						
PW-IM280B-1Y120EZ	+12V	16.66A	23.33A	±3%	150mV	5V/0.5A	12V/0.3A	200W	280W
PW-IM280B-1Y240EZ	+24V	8.33A	11.66A	±3%	240mV	5V/0.5A	12V/0.3A	200W	280W
PW-IM280B-1Y280EZ	+28V	7.14A	10A	±2%	280mV	5V/0.5A	12V/0.3A	200W	280W
PW-IM280B-1Y360EZ	+36V	5.55A	7.77A	±2%	300mV	5V/0.5A	12V/0.3A	200W	280W
PW-IM280B-1Y480EZ	+48V	4.16A	5.83A	±2%	300mV	5V/0.5A	12V/0.3A	200W	280W
PW-IM280B-1Y540EZ	+54V	3.7A	5.18A	±2%	400mV	5V/0.5A	12V/0.3A	200W	280W

Note:

1. Output connector options: Z=T (Terminal block type, pitch 8.25mm) or Z=M (Mini-fit type, pitch 4.2mm) or Z=C (Connector type, pitch=3.96mm).
2. All models are equipped with 5Vsb & 12V fan outputs.
3. All models have total power 200W Max. convection or 280W Max. forced air cooling.
4. Ripple and noise are measured at oscilloscope 20MHz bandwidth by a 47uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel at output connector.

MECHANICAL SPECIFICATION

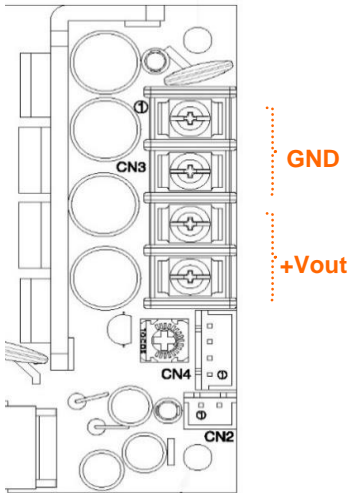


Dimension : L127 xW83.2 xH40mm (5" x 3.28" x 1.58"

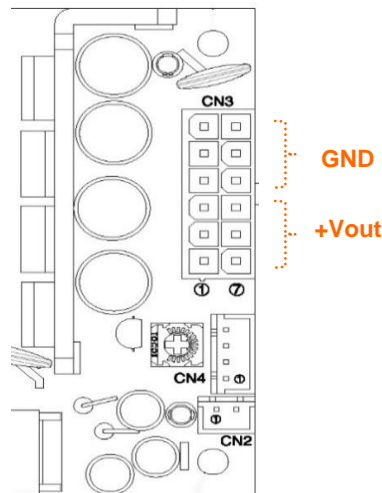
NOTE:TOLERANCE: +/-0.5mm(0.02")

MAIN OUTPUT OPTIONAL TYPE (CN3)

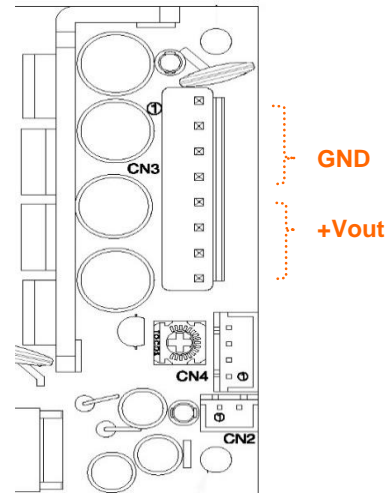
Terminal Block Type



Mini Fit Type



Connector Type



MECHANICAL SPECIFICATION

MATCHING CONNECTORS

CN1: Input Connector

JST B2P3-VH pitch: 3.96mm or equivalent, mates with JST VAR-2 or equivalent

Pin #	Signal
1	AC Line
2	AC Neutral

CN2: FAN Output Connector

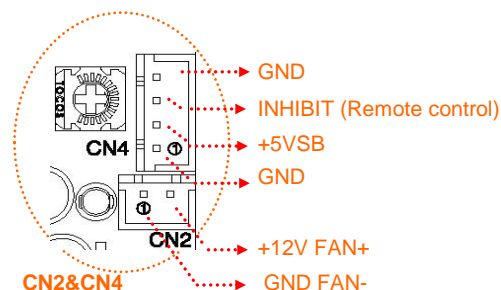
JST B2B-XH-A pitch: 2.5mm or equivalent, mates with JST XHP-2 or equivalent

Pin #	Signal
1	GND FAN-
2	+12V FAN+

CN4: Remote control & Standby supply

JST B4B-XH-A pitch: 2.5mm or equivalent, mates with JST XHP-4 or equivalent

Pin #	Signal
1	GND
2	+5VSB
3	INHIBIT (Remote control)
4	GND



INHIBIT→ Logic level HIGH (5V) or Floating : Enable, Logic level LOW : Disable

CN3: Main Output Connector

Terminal Block Type

4-Pole Terminal block pitch: 8.25mm , rate 20A/300V or equivalent

Pin #	Signal
1	GND
2	GND
3	+Vout
4	+Vout

Connector Type

JST B8P-VH-B pitch: 3.96mm or equivalent, mates with JST VHR-8N or equivalent

Pin #	Signal	Pin #	Signal
1	GND	5	+Vout
2	GND	6	+Vout
3	GND	7	+Vout
4	GND	8	+Vout

Mini Fit type

12 PIN Min Fit Pitch:4.2mm .

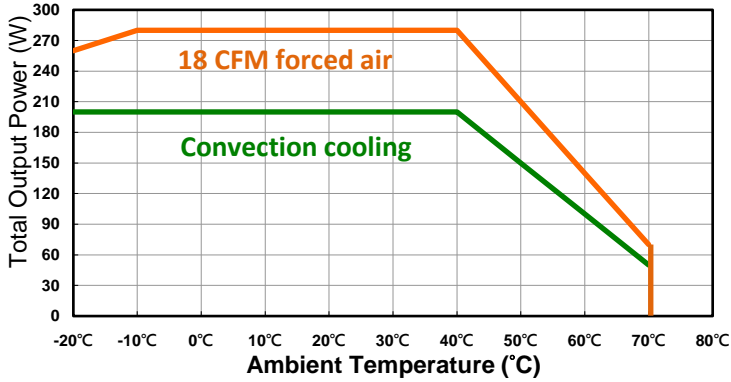
Molex P/N 39-28-1123 or equivalent.

Pin #	Signal	Pin #	Signal
1	+Vout	7	+Vout
2	+Vout	8	+Vout
3	+Vout	9	+Vout
4	GND	10	GND
5	GND	11	GND
6	GND	12	GND

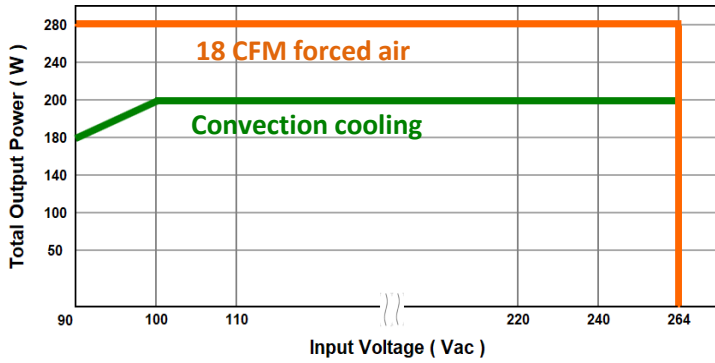
ENVIRONMENTAL

DERATING CURVE

Power Derating Curve



**convection cooling and
18CFM forced air cooling
Derate linearly 2.5% per °C from 41 to 70°C**



**Convection cooling total output 200W
Derate linearly 1% per Vac from 100 to 90Vac**

DC FAN Recommended Direction

