



FEATURES

- 3" x 5" Industrial Standard Footprint
- 1.18" Low Profile Open Frame
- 0.9 to 0.95 Power Factor
- Medical & ITE Dual Approvals
- 5000m (ITE), 3000m (Medical) Operation Altitude
- Remote On/Off Control



ELECTRICAL SPECIFICATIONS

Input Voltage 90~264 VAC
 Input Frequency 47~63 Hz
 Input Current 3.5A (rms) max. @ 115 VAC,
 2A (rms) max. @ 230 VAC
 Inrush Current 30A max. @ 115 VAC, 60A max.
 @ 230 VAC at cold start +25°C
 Earth Leakage Current 100 µA max. @ 264 VAC
 Power Factor >0.95 @ 115 VAC, >0.9 @ 230 VAC
 Output Power Ratings See table
 Output Voltage Regulation .. ±3%
 Ripple and Noise See table
 Remote Inhibit Requires an external TTL high
 level signal to inhibit the output

STANDARDS & COMPLIANCES

EMC Standards EN 60601-1-2, EN 55024;
 EN 55011/55022 & FCC Class B
 Safety Standards UL/IEC/EN 60601-1 3rd Edition,
 UL/cUL/IEC/TUV EN 60950-1
 Agency Approvals UL, CUS, TUV, CE, CB, FCC
 Other Compliances RoHS, ErP

GENERAL SPECIFICATIONS

Efficiency >91% typ. @ full load, 115 VAC
 Switching Frequency 80 KHz
 Hold-up Time >10 ms typ. @ full load, 115 VAC
 Operating Temperature 0°C to +70°C
 Derating Derate from 100% at +51°C
 linearly to 50% at +70°C
 Storage Temperature -20°C to +85°C
 Temperature Coefficient ±1%/°C max.
 Operating Humidity 0% to 90% non-condensing
 Short-Circuit Protection Auto-recovery
 Overload Protection Set at 105% to 150% of the
 maximum rating, Auto-recovery
 Overvoltage Protection Latching type, AC recycle
 Withstand Voltage 5,656 VDC from input to output,
 2,121 VDC from input to ground,
 2,121 VDC from output to ground
 MTBF >300K hours @ full load and
 25°C ambient temperature
 calculated per Telcordia
 (Bellcore)

MODELS LIST

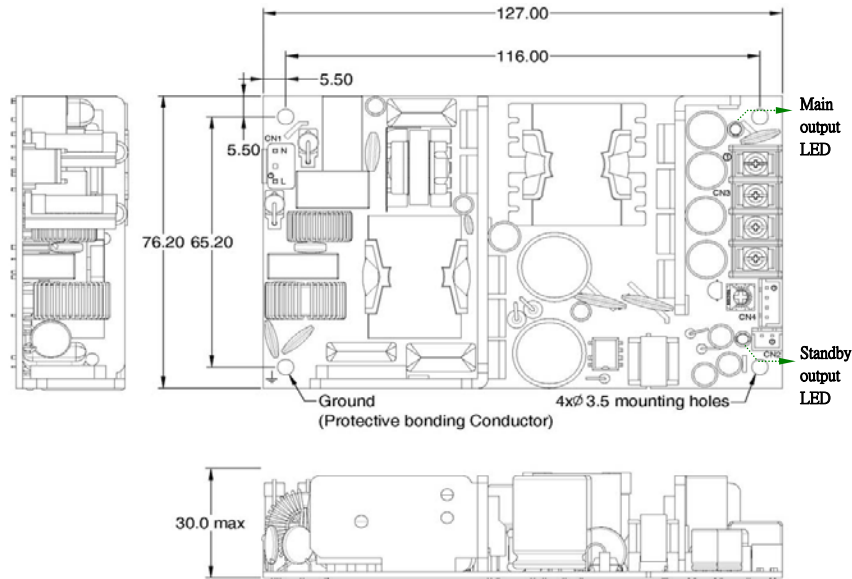
Product No. ⁽¹⁾	Output Voltage	Max. Load		Output Regulation	Ripple & Noise (Vp-p) ⁽²⁾	Standby Supply	Fan Output	Max. Output Power @ Convection	Max. Output Power @ 18 CFM
		@ Convection	@ 18 CFM						
TWM280-12	+12V	17.5A	23.33A	±3%	150mV	5V/0.5A	12V/0.3A	210W	280W
TWM280-24	+24V	8.75A	11.66A	±3%	240mV	5V/0.5A	12V/0.3A	210W	280W
TWM280-28	+28V	7.5A	10A	±2%	280mV	5V/0.5A	12V/0.3A	210W	280W
TWM280-48	+48V	4.375A	5.83A	±2%	300mV	5V/0.5A	12V/0.3A	210W	280W
TWM500-54	+54V	3.88A	5.18A	±2%	400mV	5V/0.5A	12V/0.3A	210W	280W

- Notes:
1. Output Connector Suffix "T" = Terminal block, suitable for all models; Suffix "M" = Mini-fit connector, suitable for 24V and up; Suffix "J" = JST connector, suitable for 24V and up.
 2. R&N are measured at 20 MHz bandwidth with a 47µF electrolytic capacitor and a 0.1µF ceramic capacitor in parallel.
 3. All models are equipped with 5Vsb & 12V fan outputs.

TWM280 Series

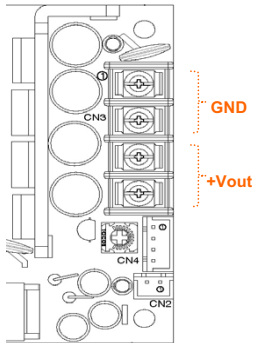
280W Medical & ITE Grade AC/DC Power Supplies

MECHANICAL SPECIFICATIONS (Unit: mm)

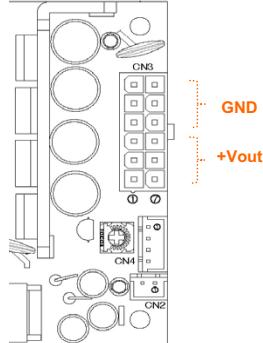


Output Connector Options

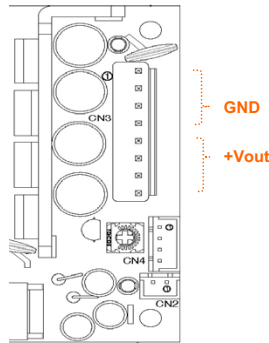
Terminal Block Type



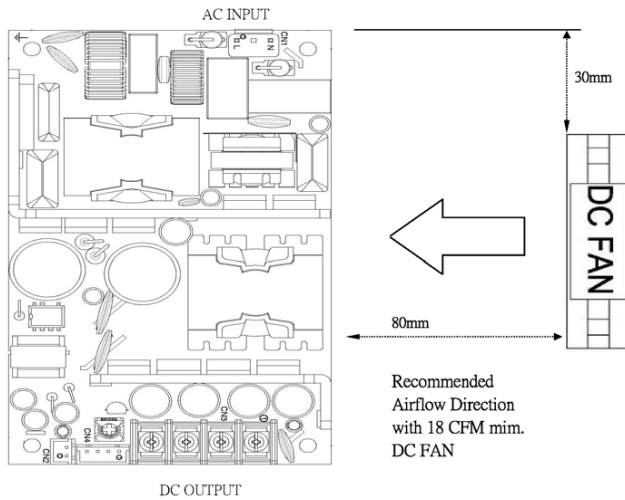
Mini Fit Type



Connector Type



Recommended Cooling Airflow Direction



INPUT & OUTPUT CONNECTORS

Input Connector: CN1

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

Pin #	Signal
1	AC Line
2	AC Neutral

Fan Output Connector: CN2

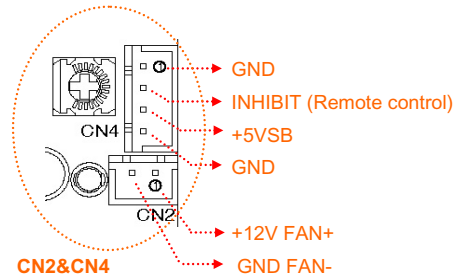
JST B2B-XH-A pitch: 2.5mm or equivalent, mates with JST XHP-2 or equivalent

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

Remote Control & Standby: CN4

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

Pin #	Signal
1	GND
2	Inhibit (Remote Control)
3	+5Vsb
4	GND



Inhibit ---> Logic Level HIGH (5V) or Floating: Enable; Logic Level LOW: Disable

Main Output Connector: CN3

Terminal Block (Suffix "T"):

4-pole terminal block, 8.25mm pitch, 20A/300V or equivalent

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

JST Connector (Suffix "J"):

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

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

Mini-Fit Connector (Suffix "M"):

12 pin mini fit pitch: 4.2mm. Molex P/N: 39-28-1123 or equivalent.

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