

**FEATURES**

- 90~264 VAC Universal Input
- Both ITE & Medical Approvals
- 150W High Power Density in 3" X 2" Footprint
- Operating Altitude: ITE (5,000m), Medical (3,000m)
- Body Floating (BF) Rated, MOPP Type

**ELECTRICAL SPECIFICATIONS**

Input Voltage	90~264 VAC
Input Frequency	47~63 Hz
Input Current	2A (rms) max. @ 115 VAC, 1A (rms) max. @ 230 VAC
Inrush Current	50A max. @ 115 VAC, 100A 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% max.

STANDARDS & COMPLIANCES

EMC Standards	EN 60601-1-2, EN 55011 Class B, EN 55032 Class B, EN 55024, FCC Part 15 Class B, FCC Part 18 Class B, CE
Safety Standards	UL/IEC/EN 60601-1 (3.1 Edition), UL/IEC/EN 62368-1 (2nd Edition)
Agency Approvals	UL, CUL, TUV, CE, CB, FCC
Other Compliance	RoHS

GENERAL SPECIFICATIONS

Efficiency	>92% @ full load, 230 VAC
Switching Frequency	45~75KHz
Hold-up Time	>10 ms @ full load , 115 VAC
Operating Temperature	-20°C to +70°C
Derating	Derate linearly 2.5%/°C from +41°C to +70°C @ convection; Derate linearly 2.5%/°C from +51°C to +70°C @ 10 CFM and 1%/°C from 0°C to -20°C @ 10 CFM
Storage Temperature	-20°C to +85°C
Operating Humidity	10% to 90% non-condensing
Short-Circuit Protection	Auto-recovery
Overload Protection	Set at 105% to 160% of the maximum rating, Auto-recovery
Overvoltage Protection	Shutdown and latch off, AC recycle
Withstand Voltage	4,000 VAC from input to output, 1,500 VAC from input to ground, 1,500 VAC from output to ground
MTBF	> 250K hours at full load and 25°C ambient temperature calculated per Telcordia (Bellcore TR-332)

MODELS LIST

Product No.	Output Voltage	Maximum Load		Regulation	Ripple & Noise (Vp-p) (3)	Max. Output
		@ Convection	@ 10 CFM			
TWM150-12	12V	8.34A	12.50A	±3%	120 mV	150W
TWM150-15	15V	6.67A	10A	±3%	240 mV	150W
TWM150-18	18V	5.56A	8.34A	±3%	240 mV	150W
TWM150-24	24V	4.17A	6.25A	±3%	240 mV	150W
TWM150-28	28V	3.58A	5.36A	±2%	280 mV	150W
TWM150-36	36V	2.78A	4.17A	±2%	300 mV	150W
TWM150-48	48V	2.09A	3.13A	±2%	300 mV	150W
TWM150-54	54V	1.86A	2.78A	±2%	300 mV	150W

Notes:

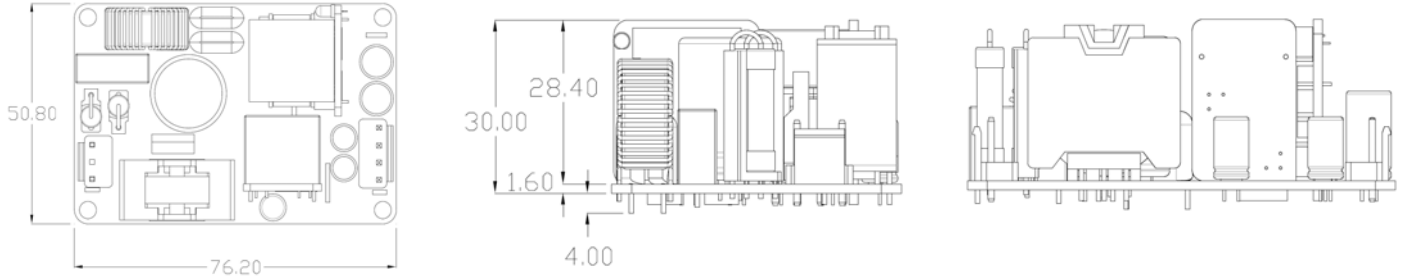
1. Standard form factor is open frame. For U-Channel format, add suffix "B". For enclosed format, add suffix "C".
2. All models have total power 100W max. convection or 150W max. forced air cooling.
3. R&N are measured at 20 MHz bandwidth with a 10µF electrolytic capacitor and with a 0.1µF ceramic capacitor in parallel.
4. Add suffix "T" for the optional Eurostyle P.C.B. 3.81mm Terminal Block output connector.

TWM150 Series

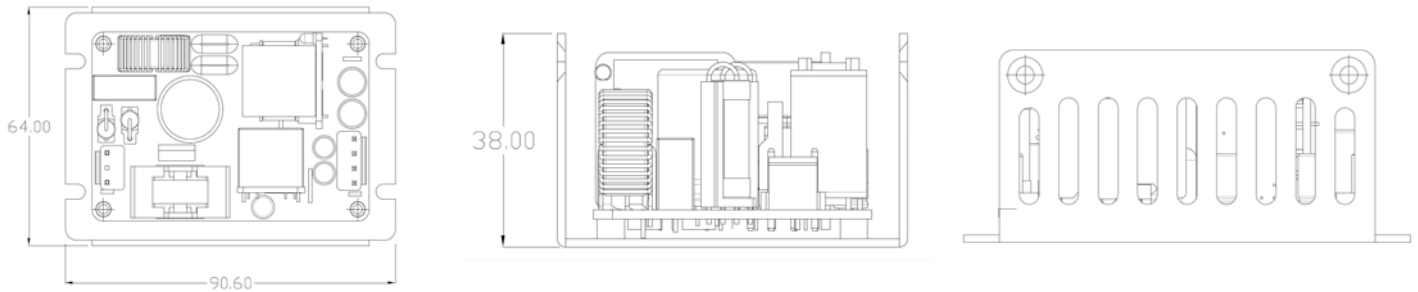
150W Medical & ITE Grade AC/DC Power Supplies

MECHANICAL SPECIFICATIONS

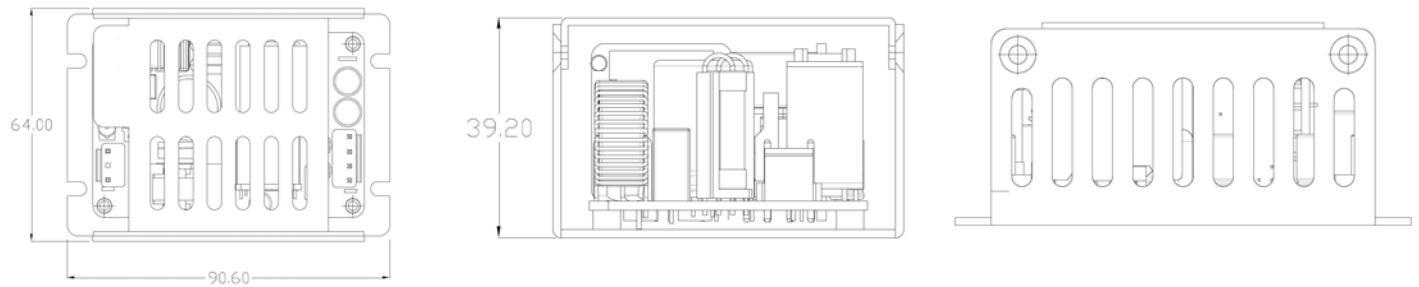
Open Frame Format



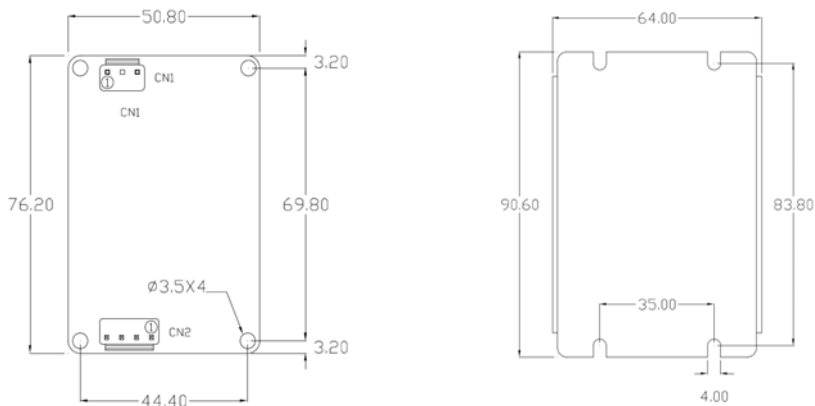
U-Channel Format



Enclosed Format



Outline Drawing



Notes:

1. Dimensions in mm
2. Tolerance: $\pm 0.5\text{mm}$

INPUT & OUTPUT CONNECTORS

CN1: Input Connector

JST B3P-VH-B (3.96mm pitch) or equivalent; mates with JST VHR-3N or equivalent.

Pin #	Function
1	AC Line
2	AC Neutral

CN2: Output Connector

Standard: JST B4P-VH-B (3.96mm pitch) or equivalent; mates with JST VHR-4N or equivalent.

Optional: Eurostyle P.C.B. terminal block, 3.81mm pitch (add suffix "T", e.g. TWM150-18T, TWM150-18TC, etc.)

Pin #	Function
1, 2	GND
3, 4	+Vo