

**FEATURES**

- 90~264 VAC Universal Input
- 0.9 to 0.95 Power Factor
- 500W with Forced Air or 360W @ Convection Cooling
- +5V Standby Power
- Power Good Signal, Remote Sense, Remote On/Off
- Optional Current Share

**ELECTRICAL SPECIFICATIONS**

Input Voltage & Frequency ...	90~264 VAC,
Input Frequency .....	47~63 Hz
Input Current .....	6A (rms) max. @ 115 VAC, 3A (rms) max. @ 230 VAC
Inrush Current .....	25A max. @ 115 VAC, 50A max. @ 230 VAC at cold start +25°C
Earth Leakage Current .....	300 µA max. @ 264 VAC, 63 Hz
Power Factor .....	>0.95 @ 115 VAC, >0.9 @ 230 VAC
Output Power Ratings .....	See table
Output Voltage Regulation ...	±5%
Ripple and Noise .....	See table
+5V Standby Power .....	0.25A @ convection, or 1A @ forced air cooling
Remote Inhibit .....	Requires an external TTL high level signal to inhibit the output
Current Share Option .....	Single wire, up to 4 units can be connected in parallel within 10% accuracy at full load

**STANDARDS & COMPLIANCES**

EMC Standards .....	EN 55011, FCC Class B
Safety Standards .....	UL/IEC/EN 60601-1 3rd Edition, ANSI/AAMI ES 60601-1: 2005, CAN/CSA-C22.2 No. 60601-1:08
Agency Approvals .....	CSA, CUS, TUV, CE, CB, FCC
Other Compliance .....	RoHS

**MODELS LIST**

Product No. <sup>(1)</sup>	Output Voltage	Min. Load	Max. Load <sup>(2)</sup>		Output Regulation	Ripple & Noise (Vp-p) <sup>(3)</sup>	Max. Output Power
			@ Convection	@ 15 CFM			
TWM500-12	+12V	0A	30A	41.67A	±5%	120mV	360W / 500W
TWM500-24	+24V	0A	15A	20.84A	±5%	240mV	360W / 500W
TWM500-30	+30V	0A	12A	16.67A	±5%	300mV	360W / 500W
TWM500-36	+36V	0A	10A	13.89A	±5%	360mV	360W / 500W
TWM500-48	+48V	0A	7.5A	10.42A	±5%	480mV	360W / 500W
TWM500-54	+54V	0A	6.67A	9.26A	±5%	540mV	360W / 500W
TWM500-57	+57V	0A	6.32A	8.78A	±5%	570mV	360W / 500W

**Notes:**

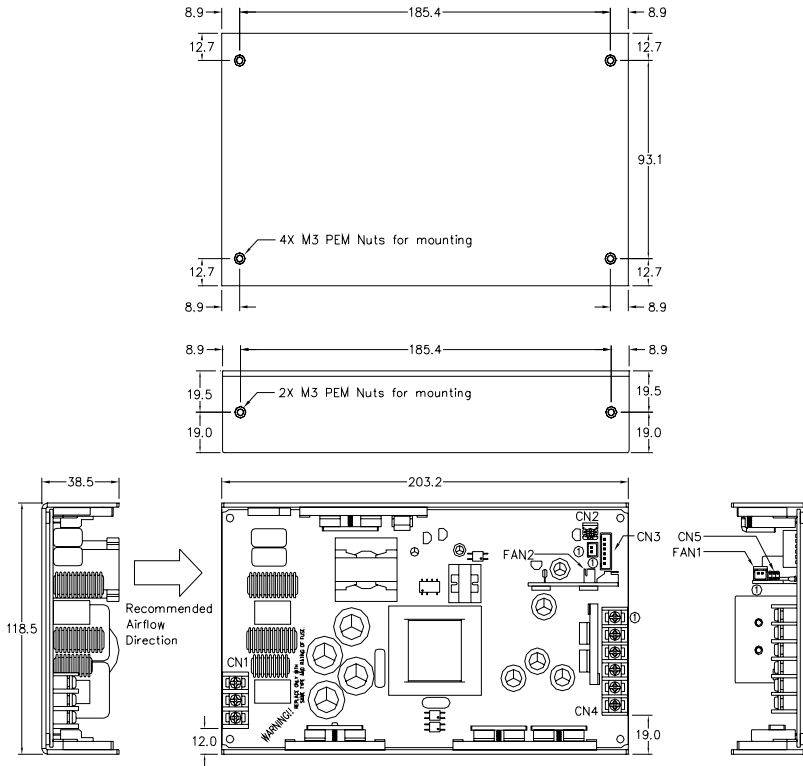
1. Standard form factor is U-Bracket. For enclosed unit with end fan, add suffix "E"; For enclosed unit with top fan, add suffix "T"; For unit with "current share" option, add suffix "D".
2. 30 CFM forced air is required to load the U-Bracket version up to 500W. Without forced air, U-Bracket unit can operate up to 360W @ +40°C ambient max.
3. R&N are measured at 20 MHz bandwidth with a 10µF electrolytic capacitor and with a 0.1µF ceramic capacitor in parallel.

**GENERAL SPECIFICATIONS**

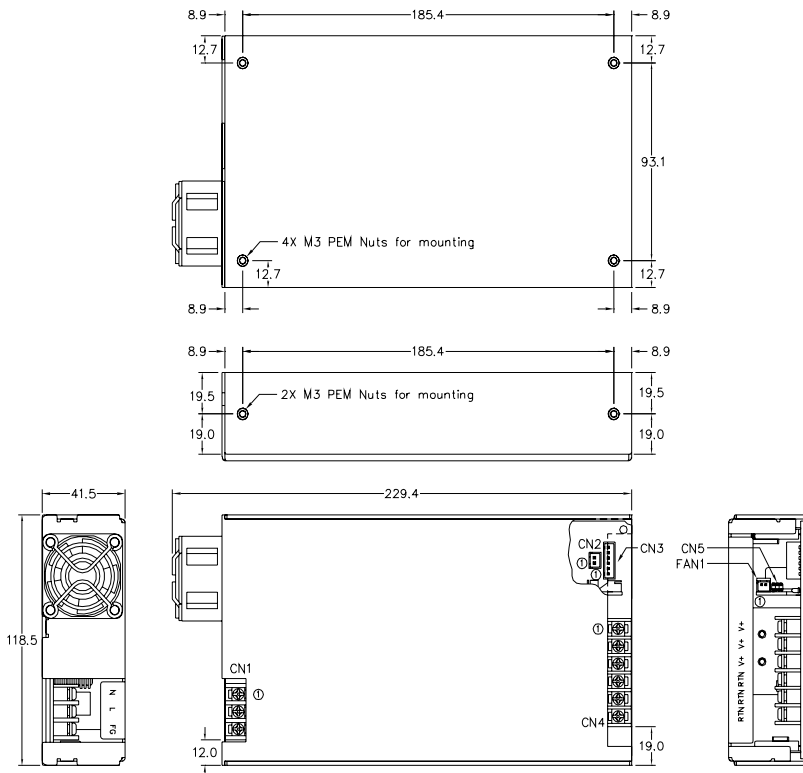
Efficiency .....	>83% at full load, 115 VAC
Switching Frequency .....	80 KHz
Hold-up Time .....	>20 ms at 115 VAC, 360W load
Operating Temperature .....	0°C to +70°C
Derating .....	Derate from 100% at +40°C linearly to 50% at +70°C
Temperature Coefficient .....	±0.04%/°C
Operating Humidity .....	10% to 95% non-condensing
Short-Circuit Protection .....	Auto-recovery
Overload Protection .....	Set at 110% to 160% of the maximum rating, Auto-recovery
Overvoltage Protection .....	Set at 130% maximum of the nominal output voltage
Withstand Voltage .....	4,000 VAC from input to output, 1,500 VAC from input to ground, 500 VAC from output to ground
MTBF .....	>100K hours at full load and 25°C ambient temperature calculated per MIL-HDBK-217F

### MECHANICAL SPECIFICATIONS (Unit: mm)

#### U-Bracket (Standard)

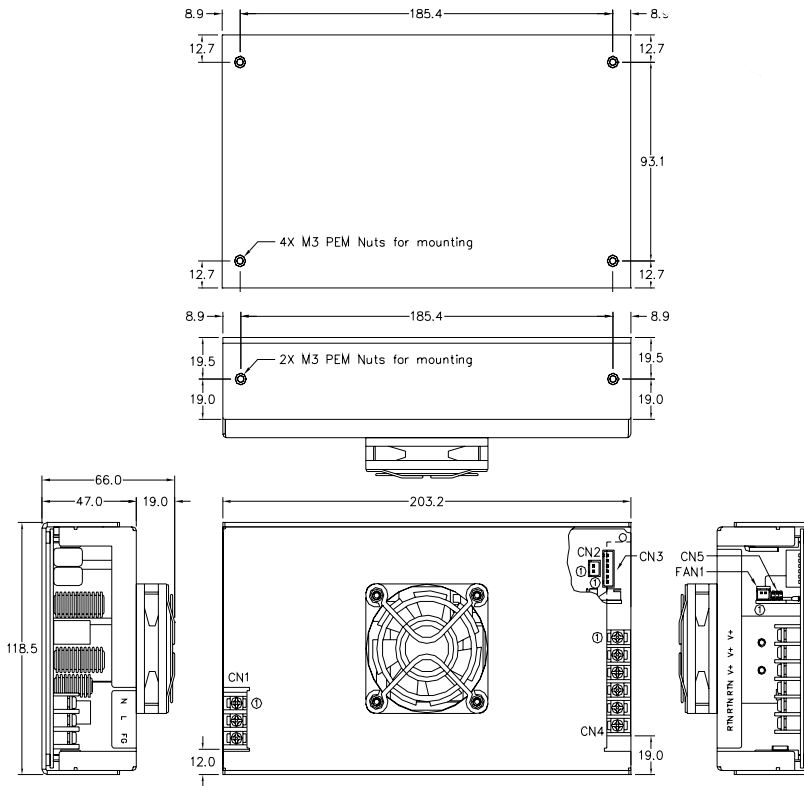


#### Enclosed with End Fan (Suffix "E")



### MECHANICAL SPECIFICATIONS (Unit: mm)

#### Enclosed with Top Fan (Suffix "T")



### INPUT & OUTPUT CONNECTORS

#### CN1: Input Connector

3-Pole Terminal block pitch: 8.25mm rate 20A/300V

Pin #	Signal
1	AC Neutral
2	AC Line
3	F.G.

#### CN2: +5VSB Output Connector

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

Pin #	Signal
1	+5VSB
2	GND

#### CN4: Main Output Connector

6-Pole Terminal block pitch: 8.25mm rate 20A/300V

Pin #	Signal
1	+Vo
2	+Vo
3	+Vo
4	RTN
5	RTN
6	RTN

### INPUT & OUTPUT CONNECTORS

#### CN3: Remote Sense Connector

JST B6B-XH-A pitch: 2.5mm or equivalent, mates with female housing JST XHP-6 or equivalent

Pin #	Signal
1	Sense +
2	Sense -
3	+5VSB
4	GND
5	INHIBIT (Remote control)
6	Current Share

INHIBIT: Logic level HIGH(+5V): Enable, Logic level LOW: Disable(0V)

#### FAN1: Fan Output Connector

JST S2B-XH-A pitch: 2.5mm or equivalent, mates with female housing JST XHP-2 or equivalent

Pin #	Signal
1	+12VDC FAN+
2	+12VDC FAN-

#### FAN2: Fan Output Connector

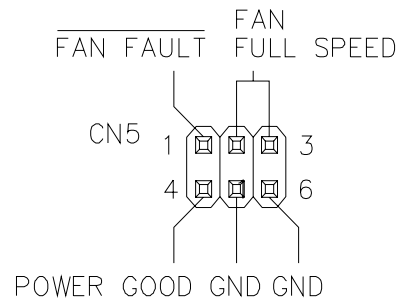
JST B2B-XH-A pitch: 2.5mm or equivalent, mates with female housing JST XHP-2 or equivalent

Pin #	Signal
1	+12VDC FAN+
2	+12VDC FAN-

#### CN5: Fan control & Power Good Signal Connector

Pitch: 2.54x2.54mm dual row 3x2 contacts

Pin #	Signal
1	FAN FAULT
2, 3	FAN FULL SPEED
4	POWER GOOD
5	GND
6	GND



FAN FAULT: Fan status indication, Fan Good: Logic level HIGH(+5V), Fan Fault: Logic level LOW(0V)

FAN FULL SPEED: Short these 2 pins ( #2 and #3 ) with mini-jumper to get highest fan speed

POWER GOOD: Power Good: Logic level HIGH(+5V), Power Fault: Logic LOW(0V)