

**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

**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 ..... 3,000 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

**STANDARDS & COMPLIANCES**

EMC Standards ..... EN 55022, FCC Class B  
 Safety Standards ..... UL 60950-1, EN/IEC 60950-1,  
 CSA C22.2 No. 60950-1  
 Agency Approvals ..... CSA, CUS, TUV, CE, CB, FCC  
 Other Compliance ..... RoHS

**MODELS LIST**

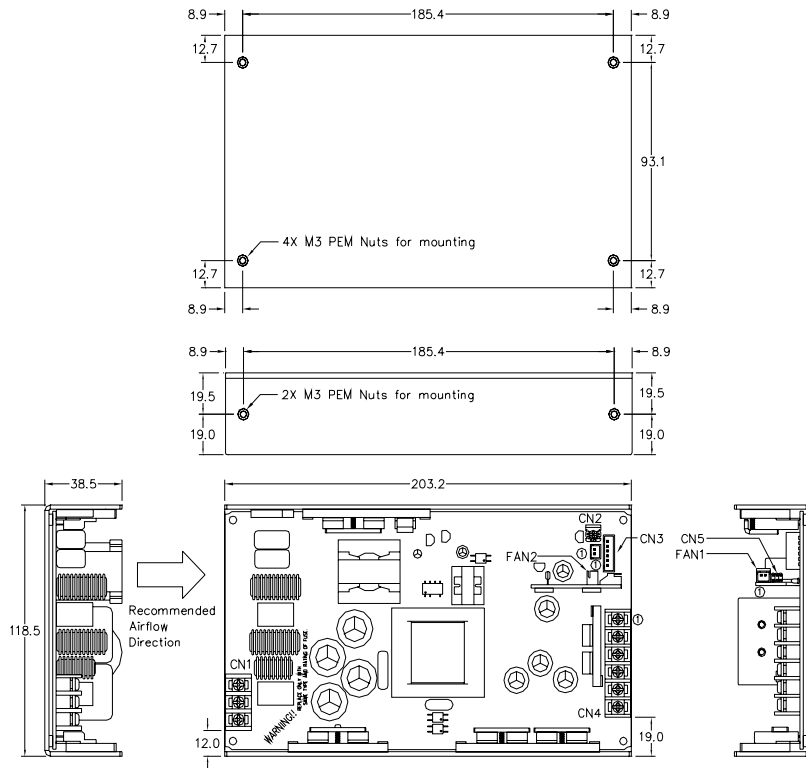
Product No. <sup>(1)</sup>	Output Voltage	Min. Load	Max. Load <sup>(2)</sup>		Output Regulation	Ripple & Noise (Vp-p) <sup>(3)</sup>	Max. Output Power
			@ Convection	@ 15 CFM			
<b>TW500-12</b>	+12V	0A	30A	41.67A	±5%	120mV	360W / 500W
<b>TW500-24</b>	+24V	0A	15A	20.84A	±5%	240mV	360W / 500W
<b>TW500-30</b>	+30V	0A	12A	16.67A	±5%	300mV	360W / 500W
<b>TW500-36</b>	+36V	0A	10A	13.89A	±5%	360mV	360W / 500W
<b>TW500-48</b>	+48V	0A	7.5A	10.42A	±5%	480mV	360W / 500W
<b>TW500-54</b>	+54V	0A	6.67A	9.26A	±5%	540mV	360W / 500W
<b>TW500-57</b>	+57V	0A	6.32A	8.78A	±5%	570mV	360W / 500W

Notes:

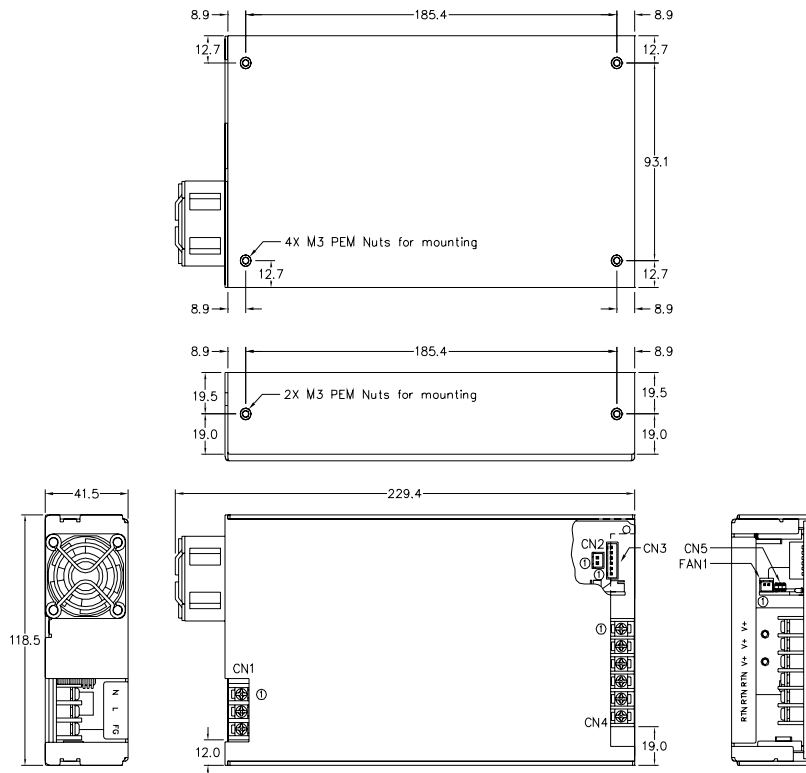
1. Standard form factor is U-Bracket. For enclosed unit with end fan, add suffix "E"; For enclosed unit with top fan, add suffix "T"; For unit with "current share" option, add suffix "D".
2. 30 CFM forced air is required to load the U-Bracket version up to 500W. Without forced air, U-Bracket unit can 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.

### MECHANICAL SPECIFICATIONS (Unit: mm)

#### U-Bracket (Standard)

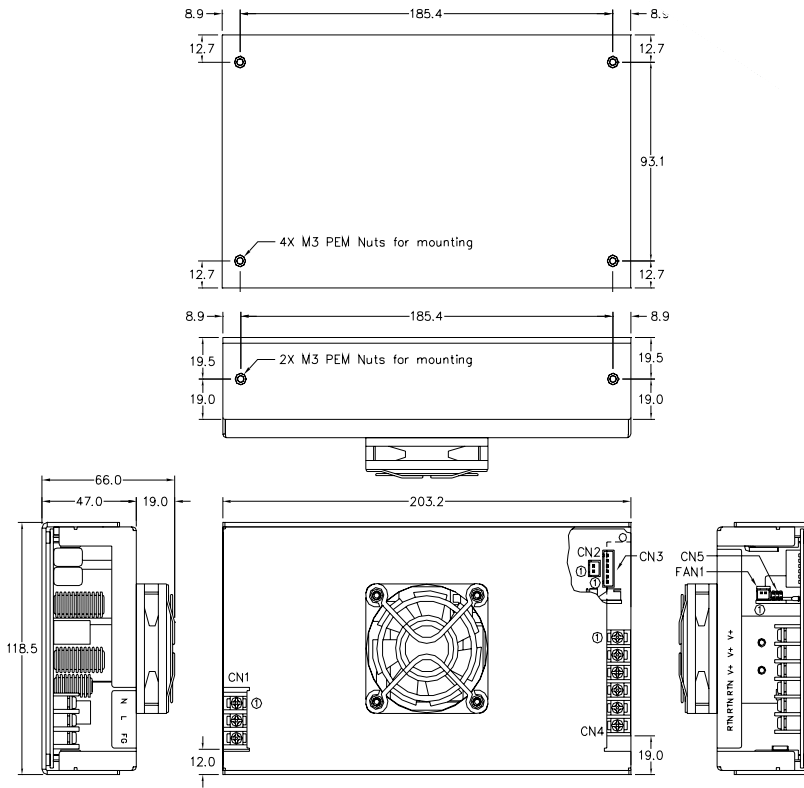


#### Enclosed with End Fan (Suffix "E")



### 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

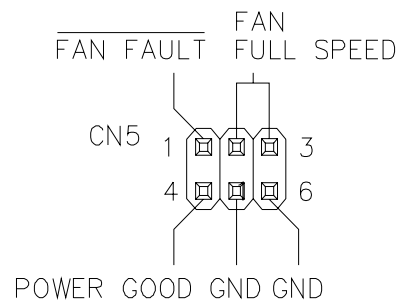
JST B2B-XH-A pitch: 2.5mm or equivalent, mates with female housing JST XHP-2 or equivalent

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)