

**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

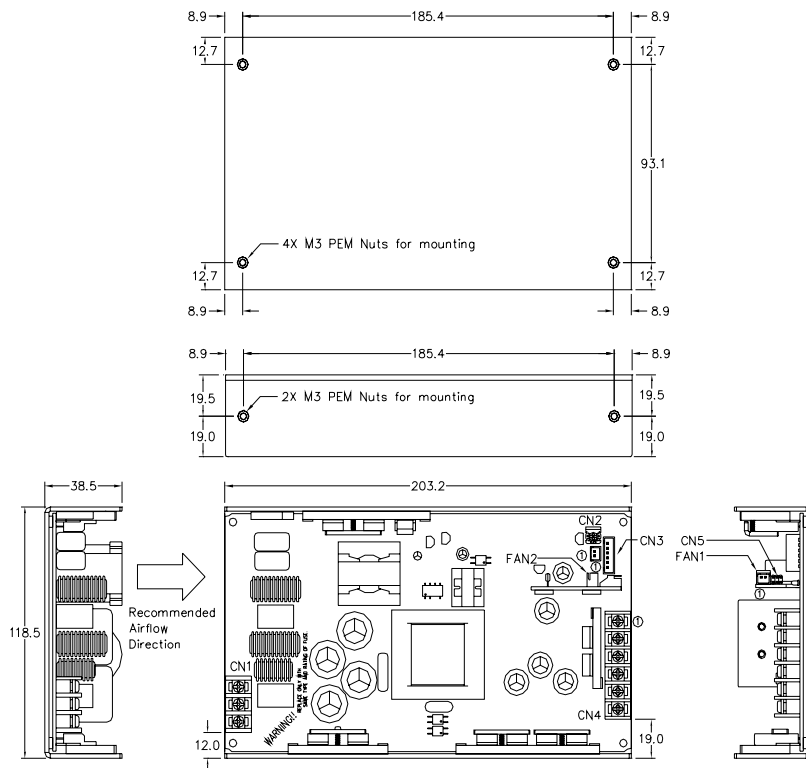
Product No. ⁽¹⁾	Output Voltage	Min. Load	Max. Load ⁽²⁾		Output Regulation	Ripple & Noise (Vp-p) ⁽³⁾	Max. Output Power
			@ Convection	@ 15 CFM			
TW500-12	+12V	0A	30A	41.67A	±5%	120mV	360W / 500W
TW500-24	+24V	0A	15A	20.84A	±5%	240mV	360W / 500W
TW500-30	+30V	0A	12A	16.67A	±5%	300mV	360W / 500W
TW500-36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

Notes:

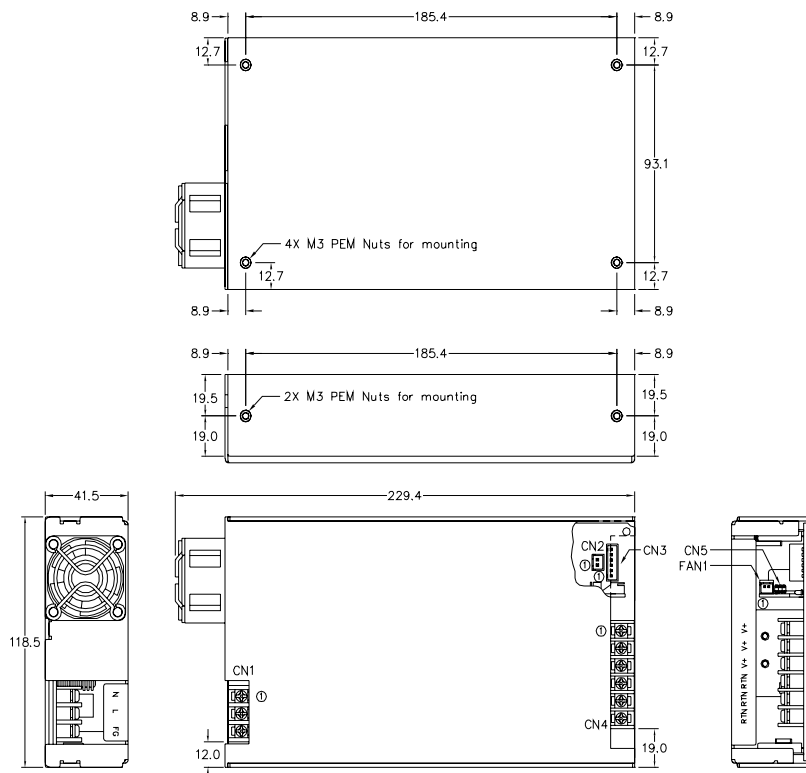
1. Standard form factor is U-Bracket. For enclosed unit with end fan, add suffix "E"; For enclosed unit with top fan, add suffix "T"; For unit with "current share" option, add suffix "D".
2. 30 CFM forced air is required to load the U-Bracket version up to 500W. Without forced air, U-Bracket unit can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

MECHANICAL SPECIFICATIONS (Unit: mm)

U-Bracket (Standard)

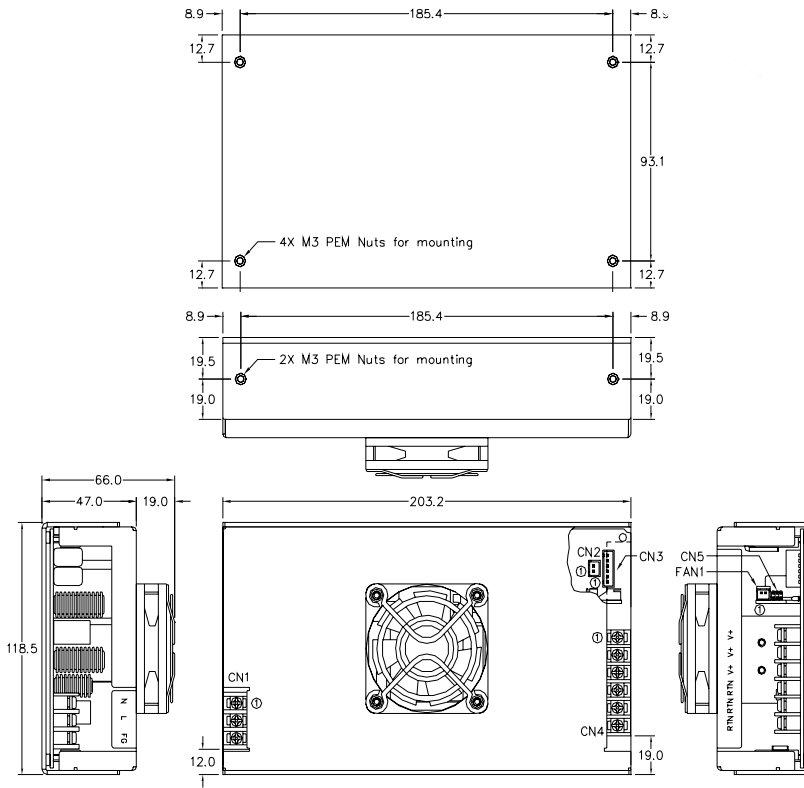


Enclosed with End Fan (Suffix "E")



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

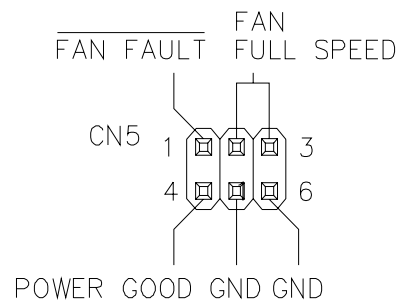
JST B2B-XH-A pitch: 2.5mm or equivalent, mates with female housing JST XHP-2 or equivalent

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)