



Features:

- Universal Input 100 – 240 VAC
- Power Density: 6.25 watts/cu in.
- 3.3, 5, 12, 24VDC Dual Output Combinations
- Over-Current Protection
- Over-Voltage Protection
- Compact Size: 1U Height
- 3 Mechanical Options
- RoHS Compliant



Input Voltage: 90-264 VAC full range, 47~63Hz.

Input Current: 6.35A at 90 VAC full load.

Inrush Current: 35A Max @ 230 VAC with full load and cold start.

PFC: Active power factor correction meet EN61000-3-2 class D.

Fan Drive: 12VDC/400mA is available to drive an external fan.

Transient Response: Returns to within 1% in less than 2.5mS for a 50% load change and the peak transient does not exceed 5%.

Overshoot: Turn-on/off not exceed 5% over nominal voltage.

Efficiency: 75% minimum @ 230 VAC and full load.

Turn On Delay: 1 second maximum at 120 VAC.

Hold Up Time: 20mS min. at 80% of full load.

Adjustability: Output user adjustable $\pm 5\%$ minimum.

Remote Sense: Designated **RS+** and **RS-** on the CN3.

Remote On-Off: Designated as **RSW** on the CN3, requires a low signal to inhibit output.

Power Supply On: Green LED designated as **LED 1** on the PCB.

LED display: Bi-color green **LED** in front panel (**SME400T2** only); Any protection occurred or **RSW** applied low signal will emit orange.

Power Good: Designated as **PG** on the CN3 will go high 100-500mS after regulation and goes low 1mS before loss of regulation.

Input Circuit Protection (primary): Two T8A/250V fuses inserted.

Over-Power Protection: C.C. mode 110-140% and auto-recovery.

Input Voltage Protection: Power shut down under 80 ± 5 VAC, and recovered over 86 VAC.

Over-Voltage Protection: Latching down will occur when output voltage exceed 130% and recycle AC input to reset.

Short Circuit Protection: Trip without damage and auto-recovery.

Over Temperature Protection: Protected in the event of excessive operating ambient 85°C, and automatic recovery.

Switching Frequency: 30KHZ fixed frequency.

Operating Temperature: 0 to 70°C ambient, de-rating at 2.5% per degree from 50°C to 70°C.

Storage Temperature: -20 to 85°C.

Operating Humidity: 5% to 90% RH, Non-condensing.

Storage Humidity: 5% to 95% RH, Non-condensing.

Vibration: Frequency 5 to 50 Hz, acceleration ± 7.35 M/(SxS) on X, Y and Z Axis.

Emissions: FCC Part 15, CISPR 22 class B, Conducted.

Safety Regulation: Approved to UL60950-1/ 60601-1, CSA C22.2 No. 60950-1-03/ 601.1-M90, TUV EN60950-1/ 60601-1, CE Mark (LVD) EN61204-3/ 60601-1-2/ 61000-3-2,3 & IEC61000-4 Series Regulations and CB.

Leakage Current: 300uA.

HI-POT Test: 1500 VAC between input line and chassis (2mA DC cut off current); 4000 VAC between primary and secondary windings; Primary to core 1500 VAC. All for 3 sec.

Grounding Test: Apply 40A from ground pin to the earthed connection point. Maximum allowable resistance is 0.1ohm.

MTBF: 100,000 Hrs (according to MIL-HBK-217F) at 30°C.

Cooling: **SMU400T2** Series: U-Chassis @ 400W max. with 23CFM airflow or 250W max. under convection cooling.

SME400T2 Series: Enclosed with side built-in fan @ 400W max.

Burn in: 45 ± 5 °C for 1 hour @ 230 VAC with full load.

Enclosure: **SMU400T2** Series: 8(L) x 5(W) x 1.6(H) inches.
SME400T2 Series: 9(L) x 5(W) x 1.6(H) inches.

Weight: **SMU400T2** Series: 1.3KG; **SME400T2** Series: 1.6KG.



SMY400T2 Series

Switch Mode Medical Power Supply,
Dual Output, Active PFC, RoHS Compliant

Date: 4/11/11

Rev: 041111

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Output Voltage and Current Chart

Model Number	Output Voltage	Max. Output Power/Current		Total Regulation	Ripple & Noise
		Type <u>U</u> (Forced Air) & Type <u>E</u>	Type <u>U</u> & <u>C</u> (Convection)		
SMY400T260R	+3.3 VDC	40 A	30 A	±5%	±1%
	+12 VDC	25 A	16.7 A	±5%	±1%
SMY400T257R	+3.3 VDC	40 A	30 A	±5%	±1%
	+24 VDC	12.5 A	8.34 A	±5%	±1%
SMY400T250R	+5 VDC	40 A	30 A	±5%	±1%
	+12 VDC	25 A	16.7 A	±5%	±1%
SMY400T254R	+5 VDC	40 A	30 A	±5%	±1%
	+24 VDC	12.5 A	8.34 A	±5%	±1%
SMY400T266R	+12 VDC	25 A	16.7 A	±5%	±1%
	+24 VDC	12.5 A	8.33 A	±5%	±1%

** To Determine Part Number:

- Replace "Y" with Desired Case Code:

Type U: U-Chassis @ 200 Watts Max. Output Power with Convection Cooling
(250 Watts for SMU400T266R with Convection Cooling)

U-Chassis @ 300 Watts Max. Output Power with 22.95CFM Airflow Cooling
(400 Watts for SMU400T266R with 22.95CFM Airflow Cooling)

Type C: U-Chassis with Cover @ 200 Watts Max. Output Power with Convection Cooling
(250 Watts for SMC400T266R with Convection Cooling)

Type E: Enclosed with Side Built-In Fan @ 300 Watts Max. Output Power
(400 Watts Max. Output Power for SME400T266R)

- Conformal Coating (Optional): Order as SMY400T2XXCR
- Input Connector: For Enclosure w. Fan (SME400T2XXR): IEC320-C14 Inlet or 3-Position Barrier Strip.
For U-Channel (SMU400T2XXR) & Cover (SMC400T2XXR): Crimp Style PCB Header (7-Pin, 5 Used) or 3-Position Barrier Strip.
- Output Connector: 16-Pin Crimp Style PCB Header or 6-Position Barrier Strip.
For Crimp Style PCB Header (or IEC320-C14 Input), Order as: SMY400T2XXR (Unchanged)
For 6-Position Barrier Strip, Order as: SMY400T2XXAR

Example: SME400T250R indicates a Unit with an Enclosed, Side Built-In Fan Case, C14 Input and 16-Pin Crimp Style PCB Header with +5, +12 VDC Outputs.

SMU400T266ACR indicates a Unit with U-Chassis Case, 6-Position Barrier Strip, and Conformal Coating with +12, +24 VDC Outputs.



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SMY400T2 Series

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Pin Connection: SMY400T2XXR

Pin	Input: 7-Pin Crimp Terminal
1-2	Line
3	No Connection
4-5	Neutral
6	No Connection
7	Ground
Pin	Output: 16-Pin Crimp Terminal
1-6	V Output (1)
7-13	Return
14-16	V Output (2)

Pin Connection: SMY400T2XXAR

Pin	6-Position Barrier Strip
1-2	V Output (1)
3-5	Return
6	V Output (2)

Notes:

Input Connector(CN1):

SMU400T2 or SMC400T2 Series: mating Molex Part No. 09-91-0700 equivalent (7 pin, 5 used), or Howder Terminal block Part No. HD-121-3P.

SME400T2 Series: IEC320 or equivalent Snap-in mounting type or DINKLE Terminal block Part No. DT-35-A02W-03 (3 pos.).

Output Connector (CN2): Mating Molex 16 pins (09-91-1600), or Howder (HD-121-6P) M3.5, 8 pins terminal block, 9.5MM Center.

Output Pin Assignment: (See right table).

Logic signal connectors (CN3): Mating JST XHP-5 or equivalent (CHYAO SHIUNN JS-2001-05)

Mating Pins: JST SXH-002T-P0.6 for AWG 30 to 26.

Mounting Inserts: 6-32, M4 4 Places individually with maximum penetration 0.15 inches on bottom side and 0.25 inches on both sides.



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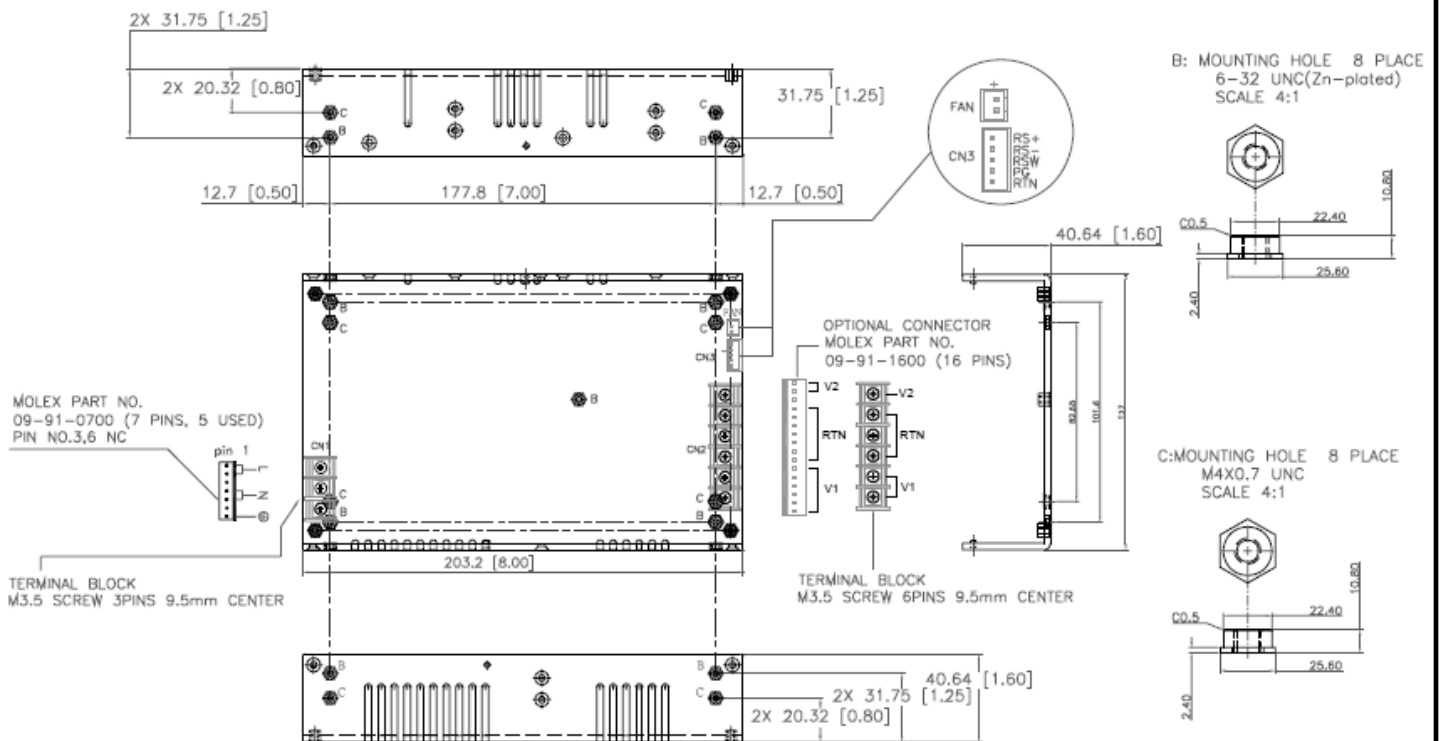
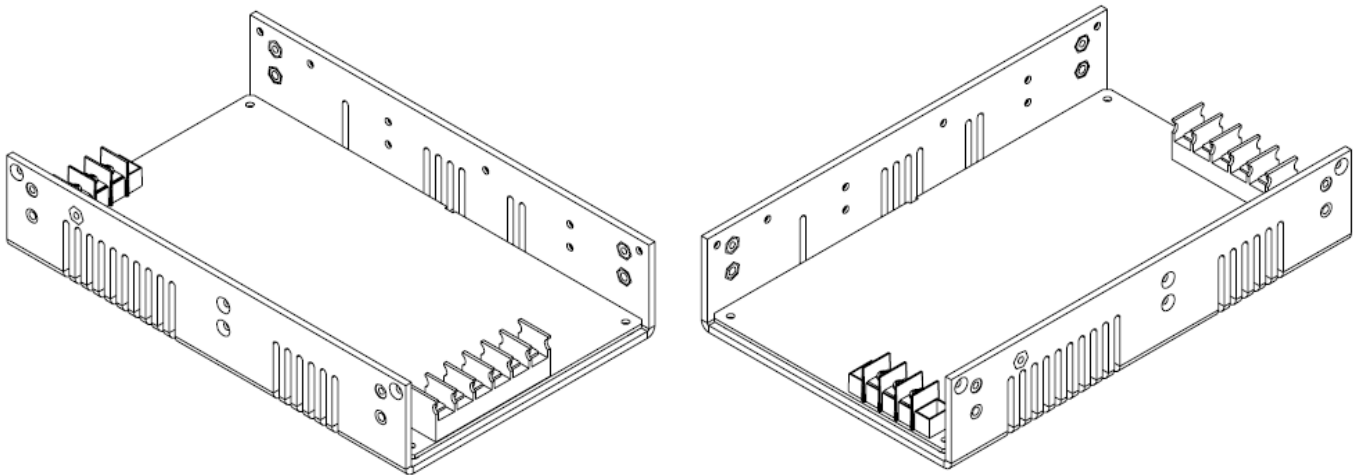
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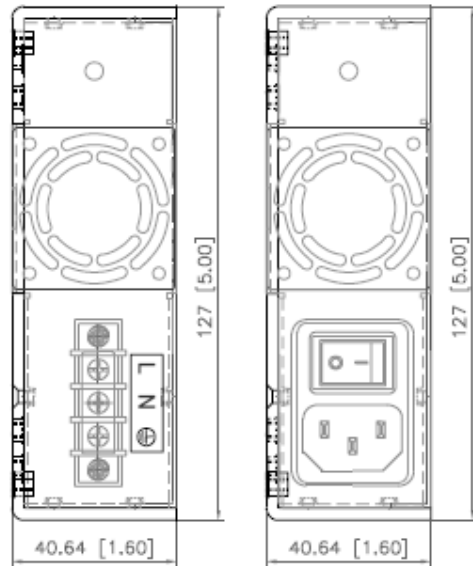
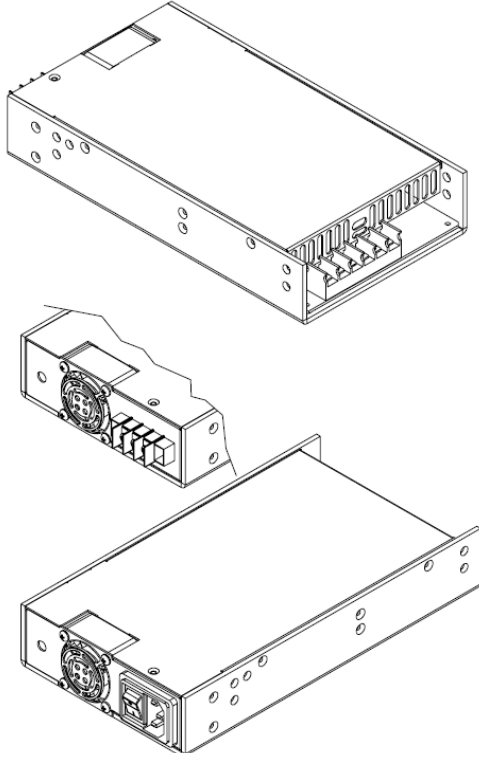
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Type **U**: U-Chassis Case
Order as: SM**U**400T2XXR

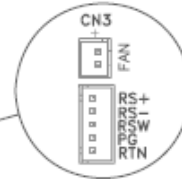
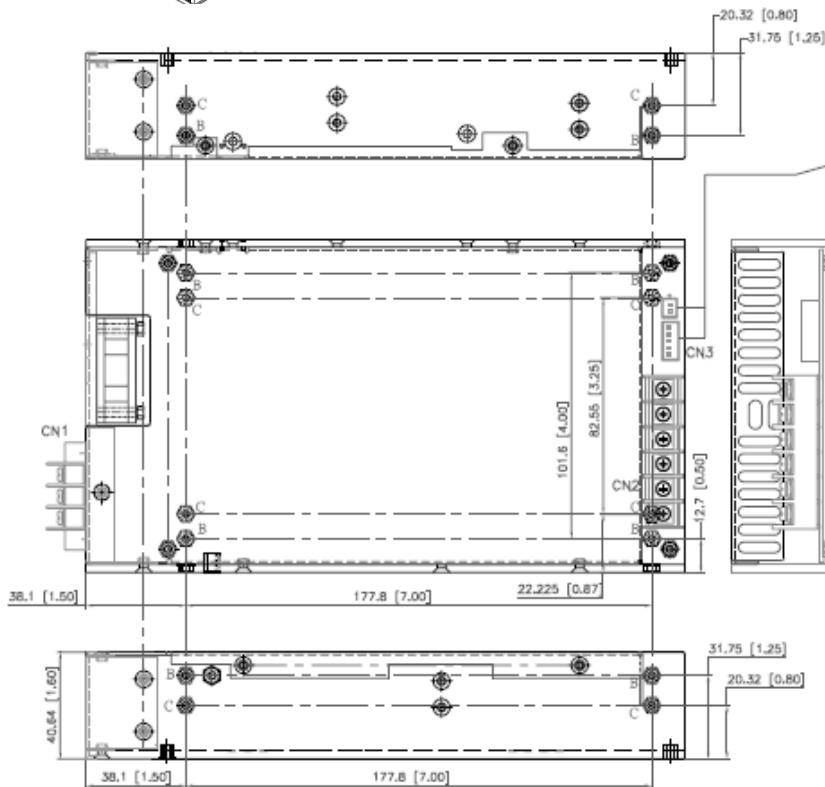
Type **C**: U-Chassis Case w/ Cover
Order as: SMC**C**400T2XXR



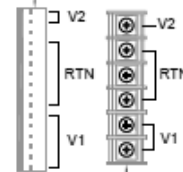
Type **E**: Enclosed Case w/ Side Fan
Order as: SME400T2XXR



TERMINAL BLOCK
M3 SCREW
3PINS 8.25mm CENTER



OPTIONAL CONNECTOR
MOLEX PART NO.
09-91-1600 (16 PINS)



TERMINAL BLOCK
M3.5 SCREW 6PINS 9.5mm CENTER

MOUNTING HOLE:
B: 6-32 UNC (Zn-plated) 8 PLACE
C: M4X0.7 UNC 8 PLACE