



FEATURES

- 2" x 4" Footprint with 1.18" Low Profile
- Open PCB, L-Bracket & Cover Available
- 90~264 VAC Universal Input
- Single, Dual, or Triple Outputs
- Low Earth Leakage Current
- Level B Emissions



MODELS LIST

Product No.	OUTPUT #1					OUTPUT #2				OUTPUT #3				Max. Output Power <sup>[3]</sup>
	Voltage	Min. Current	Max. Current @ Convection	Max. Current @ 5 CFM <sup>[2]</sup>	ToI.	Voltage	Min. Current	Max. Current	ToI.	Voltage	Min. Current	Max. Current	ToI.	
TMC60-S05	5V	0A	11A	–	±2%	–	–	–	–	–	–	–	–	55W
TMC60-S12	12V	0A	5A	–	±2%	–	–	–	–	–	–	–	–	60W
TMC60-S15	15V	0A	4.3A	–	±2%	–	–	–	–	–	–	–	–	64W
TMC60-S24	24V	0A	2.7A	–	±2%	–	–	–	–	–	–	–	–	64W
TMC60-S48	48V	0A	1.35A	–	±2%	–	–	–	–	–	–	–	–	64W
TMC60-D23	+5V	0.5A	6A	8A	±3%	+12V	0.1A	3A	±5%	–	–	–	–	55W
TMC60-D25	+5V	0.5A	6A	8A	±3%	+24V	0.1A	1.5A	±5%	–	–	–	–	55W
TMC60-T31	+5V	0.5A	6A	8A	±3%	+12V	0.1A	3A	±5%	-12V	0A	0.5A	±4%	55W
TMC60-T31-3	+3.3V	0.8A	6A	8A	±3%	+5.2V	0.1A	3A	±5%	+12V	0A	0.5A	±4%	37.5W
TMC60-T31-5	+5V	0.5A	6A	8A	±3%	+3.3V	0A	1.5A	±5%	+12V	0A	0.5A	±4%	37.5/47.5W <sup>[4]</sup>
TMC60-T32	+5V	0.5A	6A	8A	±3%	+15V	0.1A	2.4A	±5%	-15V	0A	0.5A	±4%	55W
TMC60-T39	+5V	0.5A	6A	8A	±3%	+24V	0.1A	1.5A	±5%	-12V	0A	0.5A	±4%	55W

NOTES:

- 1) Safety approvals are for PCB form only. To order L-bracket version, add suffix "B", e.g. TMC60-S12B. To order enclosed version, add suffix "C", e.g. TMC60-D23C.
- 2) Maximum current of output #1 for multi-output models can be 8A at 5 CFM forced air provided by user.
- 3) The maximum output power listed is convection rating.
- 4) 47.5W with 5 CFM forced air is provided by user.
- 5) The output voltages of a multiple output model may go outside of the listed tolerance when an output load current is beyond its limits.

INPUT & OUTPUT SPECIFICATIONS

Input Voltage Range .....	90~264 VAC	Overvoltage Protection .....	Provided on output #1 only; set at 112-132% of its nominal output voltage
Input Frequency .....	47~63 Hz	Overcurrent Protection .....	All outputs protected to short-circuit conditions
Input Current .....	1.3A (rms) @ 100 VAC 0.7A (rms) @ 240 VAC	Temperature Coefficient .....	±0.04%/°C max.
Inrush Current .....	30A @ 115 VAC or 60A @ 230 VAC, at 25°C cold start	Transient Response .....	Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 μs after a 25% step load change
Earth Leakage Current .....	150 μA max. @ 264 VAC, 63Hz		
Output Power Ratings .....	See rating table		
Tolerance .....	See rating table		
Ripple and Noise*	100 mVp-p on 3.3V & 5V models; 1% peak to peak on other models		

\* Measured with 20 MHz BW at rated line voltage and output load ranges, with a 10μF tantalum capacitor in parallel with a 0.1μF ceramic capacitor across the output.

# TMC60 Series

## 37.5~64 Watts Medical & ITE AC/DC Power Supplies

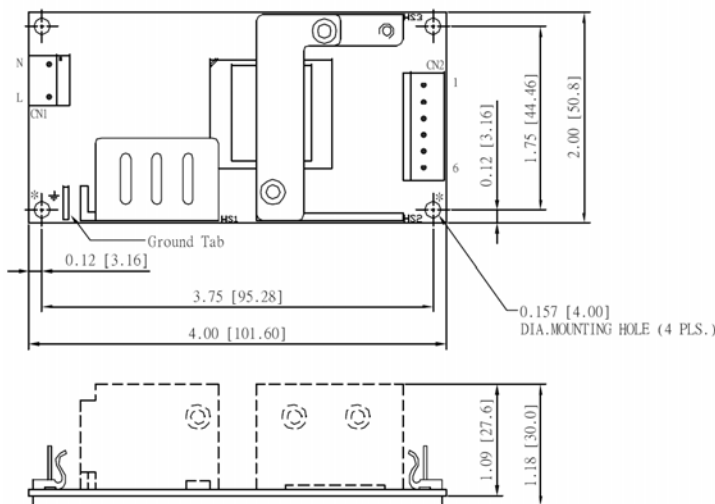
### GENERAL SPECIFICATIONS

Switching Frequency .....	62±5 KHz
Efficiency .....	80~88% typical except 75% on TMC60-T31-3 and TMC60-T31-5
Hold-up Time .....	12 ms minimum at 110 VAC
Line Regulation .....	±0.5% max. at full load
Operating Temperature .....	-10°C to +70°C
Derating .....	Derate from 100% @ +50°C linearly to 50% @ +70°C
Storage Temperature .....	-40°C to +85°C
Relative Humidity .....	5% to 95% non-condensing
Withstand Voltage .....	4,000 VAC from input to output 1,500 VAC from input to ground 500 VAC from output to ground
MTBF .....	400K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

### STANDARDS & COMPLIANCES

IEC 60601-1-2 .....	EMC & Immunity performance
EN 55011, EN 55022 .....	Class B conducted and radiated
FCC, VCCI .....	Class B conducted and radiated
EN 61000-3-2 .....	Harmonic distortion, Class A & D
EN 61000-3-3 .....	Line flicker
EN 61000-4-2 .....	ESD, ±8 KV air and ±6 KV contact
EN 61000-4-3 .....	Radiated immunity, 3V/m
EN 61000-4-4 .....	Fast transient/burst, ±2 KV
EN 61000-4-5 .....	Surge, ±1 KV diff., ±2 KV com.
EN 61000-4-6 .....	Conducted immunity, 3 Vrms
EN 61000-4-8 .....	Magnetic field immunity, 3A/m
EN 61000-4-11 .....	Voltage dip immunity, 30% reduction for 500 ms, 60% reduction for 100 ms, >95% reduction for 10 ms
Safety Standards .....	UL 60601-1, EN 60601-1, CSA C22.2 No. 601.1, UL 60950-1, EN 60950-1, CSA C22.2 No. 60950-1
Agency Approvals .....	UL, cUL, TUV, CB, CE (LVD)
Other Compliance .....	RoHS

### MECHANICAL SPECIFICATIONS



DC OUTPUT CONNECTORS (CN2)			
PIN	SINGLE	DUAL	TRIPLE
1	OUTPUT	OUTPUT #1	OUTPUT #1
2	OUTPUT	OUTPUT #1	OUTPUT #1
3	RETURN	COMMON RETURN	COMMON RETURN
4	RETURN	COMMON RETURN	COMMON RETURN
5	N.C.	N.C.	OUTPUT #3
6	N.C.	OUTPUT #2	OUTPUT #2

#### NOTES:

- Dimensions: inches [mm]
- Tolerance: 0.02 [0.5] maximum
- Connector CN1: Molex header 09-65-2038 or equivalent, mating with Molex housing 09-50-1031 or equivalent.
- Connector CN2: Molex header 09-65-2068 or equivalent, mating with Molex housing 09-50-1061 or equivalent.
- Ground tab is 0.25 [6.35] x 0.032 [0.8] fast-on connector.
- To ensure compliance with level B emissions, connect the two \* marked mounting holes with metallic standoffs to chassis.
- Weight: 205 grams (0.45 lb.) approx.