

# **GNT60 MEDICAL SERIES**

SINGLE OUTPUT POWER SUPPLY

### Low Power Medical Power Supplies 65 Watt AC/DC Universal Input Power Supply

### **Summary:**

- 100 240 Vac nominal input range
- Overvoltage and short circuit protection
- Approved to UL, CSA and EN Standards
- Class II input available (G2T60)
- RoHS Compliant Model Available (G suffix)

The GNT60 Series is a 65 W universal input AC/DC power supply in a very small footprint. With the medical approvals the GNT60 is ideal for a variety of medical device applications including small single board computers, battery charging, running small motors, pumps, and solenoids. The series, with approval to 60601-1 and 60950 standards, improves design-in time and reduces end system compliance costs.



## Specifications:

OUPUT SPECIFICATIONS			
Output Power	Natural Convec- tion	60 Watts max.(65 W with airflow) See table	
Total Regulation		See table	
Rise time	At turn-on	2.0 s max.	
Transient response	Main output 50% 0.2 A/µs	3.55% max. dev. 1 μs recovery to 0.5%	
Temperature Coefficient		+/-0.03%/oC	
Overvoltage protection		108% to 130%	
Short Circuit protection	Cycling/foldback	Yes	

INPUT SPECIFICATIONS			
Input Voltage range	Universal input	100-240 nom (85 - 264 max) Vac	
Input frequency		55 Hz +/- 10 Hz	
Input surge current	Thermistor limited	37 A max.	
Ground Leakage current	264 Vac 60 Hz	300 μA max. (400 μA single fault)	
Input current	120 Vac	1.2 A	
	230 Vac	0.7 A	
Input fuse	F1,F2	3.15 A	

EMC INFORMATION				
Conducted emissions	EN55011	Level B		
Radiated emissions	EN55011	Level A		
Line freq. harmonics	EN61000-3-2	Complies		
Voltage fluctuations	EN61000-3-3	Complies		
ESD Air	EN61000-4-2	8 kV contact		
ESD Contact	EN61000-4-2	6 kV air		
Radiated immunity	EN61000-4-3	3 V/m		
Fast Transients (EFT)	EN61000-4-4	2 kV		
Line surge immunity	EN61000-4-5	1 kV diff /2 kV cm		
Conducted immunity	EN61000-4-6	3 Vrms		
Power freq. mag. field	EN61000-4-8	3 A/m		
Voltage dip immunity	EN61000-4-11 100 Vac	5 cycles 40 % Vnom 22% load 25 cycles 70 % Vnom 52% load 0.5 cycles <5% Vnom 88% load		

ENVIRONMENTAL SPECIFICATIONS			
Thermal Performance	operating ambient (see ratings chart)	0-70 °C	
	non-operating	-40 to +85 °C	
	0 - 50 ℃	Full load. See table.	
	50 -70 °C ambient	derate to 50%	
Relative Humidity	non-condensing	5% - 95% RH	
Maximum Altitude	operating / non-operating	10,000 ft. / 40,000 ft. max.	
Vibration	5 Hz- 500 Hz	2.5 g rms	
Shock	per MIL-STD-810E	516.4 part IV	

GENERAL SPECIFICATIONS			
Hold-up time	120 Vac, 60 Hz	16 ms at 60 Watts output	
Efficiency	120 Vac 60 W output	>80 %	
Isolation voltage	input to ouput input to ground	4000 Vac 1500 Vac	
Switching frequency	fixed	60 KHz, +/- 5 KHz	
Safety Approvals		UL/EN/IEC 60601-1 CSA22.2 No.601, UL/EN/IEC 60950-1 1st Edition, CSA22.2 No.60950-1-03	
Maximum weight		140 g (0.29 lbs)	

MODEL NUMBER	50°C Airflow 65 W (1)	40°C Convection	50°C Convection	RIPPLE	REGULATION
GNT60-12	12 V 5.0 A	12 V 4.2 A	12 V 3.35 A	120 mV	2%
GNT60-15	15 V 4.35 A	15 V 4.0 A	15 V 3.7 A	150 mV	2%
GNT60-24	24 V 2.7 A	24 V 2.1 A	24 V 1.9 A	240 mV	2%
GNT60-48	48 V @ 1.35 A	48 V @ 1.25 A	48 V @ 1.35 A	480 mV	2%

#### NOTES

1. All models 65 W with 100 lfm airflow except GNT60-12 (60 W)

2. When the input voltage is less than 90 Vac the operating temperature range is 0°C to 40°C. The ripple and regulation specs. may not be met.

3. Peak output rating is 70 Watts for 1 minute.

4. Noise 0.5% RMS, 1% Pk-Pk, 20 MHz Bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply.

5. Heatsink temperatures should not be allowed to exceed 90  $^{\rm o}{\rm C}$ 

6. Installation data is online at www.condorpower.com

7. Add "G" suffix to model number for RoHS compliant model.

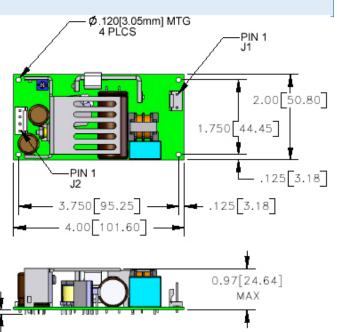
8. Convection cooling rating is 40 Watts worst case (GNT60-12 @ 50°C)

### **Mechanical Notes**

INPUT	J1 AMP P/N 640445-2	
	PIN 1 AC LINE	
	PIN 3 AC NEUTRAL	
GROUND	0.187 FASTON	

OUTPUT	J2 AMP P/N 640445-4	
	PIN 1 OUTPUT 1	
	PIN 2 OUTPUT 1	
	PIN 3 COMMON	
	PIN 4 COMMON	

MATING CONNECTOR (TYCO/AMP)			
INPUT	HOUSING 640250-3	CONTACT 640706-1	
OUTPUT	HOUSING 640250-4	CONTACT 640706-1	





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