

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.

CONDOR
DC Power Supplies



Specifications:

OUTPUT SPECIFICATIONS		
Output Power	Natural Convection	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 °C	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

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

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 output 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

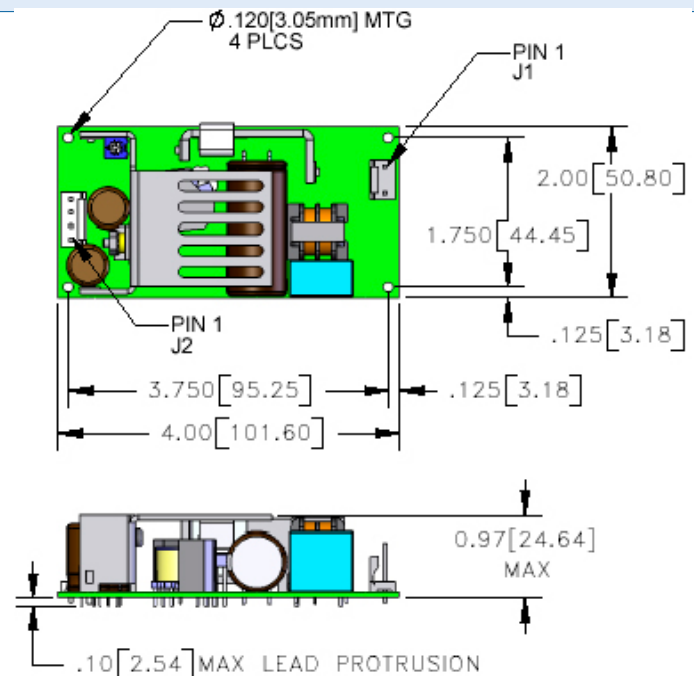
1. All models 65 W with 100 lfm airflow except GNT60-12 (60 W)
2. When the input voltage is less than 90 Vac the operating temperature range is 0°C to 40°C. The ripple and regulation specs. may not be met.
3. Peak output rating is 70 Watts for 1 minute.
4. Noise 0.5% RMS, 1% Pk-Pk, 20 MHz Bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply.
5. Heatsink temperatures should not be allowed to exceed 90 °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



SL Power Electronics Corp., 6050 King Drive, Bldg. A, Ventura, CA 93003, USA. Phone:(805) 486 4565 Fax:(805) 487 8911 www.slpower.com. GNT60 Rev 4/7/10.
Data Sheet © 2010 Condor DC Power Supplies Inc. The information and specifications contained in this data sheet are believed to be correct at time of publication.
However, SL Power accepts no responsibility for consequences arising from reproduction errors or inaccuracies. Specifications are subject to change without notice.