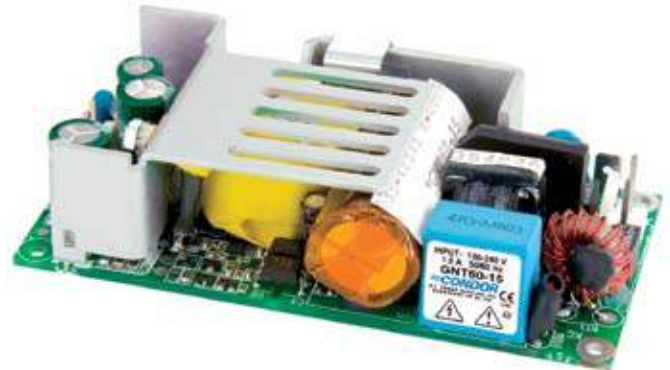


Low Power Medical Power Supplies 65 Watt AC/DC Universal Input Power Supply

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:



| 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/ μ s | 3.55% max. dev. 1 μ s 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 μ A max. (400 μ A 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 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

- All models 65 W with 100 lfm airflow except GNT60-12 (60 W)
- 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.
- Peak output rating is 70 Watts for 1 minute.
- Noise 0.5% RMS, 1% Pk-Pk, 20 MHz Bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply.
- Heatsink temperatures should not be allowed to exceed 90 °C
- Installation data is online at www.condorpower.com
- Add "G" suffix to model number for RoHS compliant model.
- 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 |

