

## GNT200/G2T200 SERIES INSTALLATION INSTRUCTIONS

### MODEL NUMBERS:

**GNT2XXX-YYY G**, where XX is a number from 12-48 which denotes the output voltage. The third X is an optional letter L, U, F or T which represents L - L Bracket only, U – U Channel only, F – U Channel with Fan/Cover and T – U Channel with Slotted Cover. YYY is any number 000-999 which denotes Value Added Options not related to Safety and G indicates compliance with RoHS. **PROTECTION CLASS I**

**G2T2XX-YYY G**, where XX is a number from 12-48 which denotes the output voltage, -YYY is any number 000-999 which denotes Value Added Options not related to Safety and G indicates compliance with RoHS. **PROTECTION CLASS II CHASSIS and COVER OPTIONS ARE NOT APPLICABLE TO THE G2T200 SERIES.**

### RATINGS:

Input: 100-240 V ac, 3.0-1.5 A, 50/60 Hz

Output: 12 thru 48 V, 200 W maximum or see table for standard output voltage models.

Model #	Output Volts	Output Current 100-240V~ Input Fan Cooled *	Output Current w/100 V~ Input Convection Cooled	Output Current w/240 V~ Input Convection Cooled	Option F #	Options L or U ##		Options T and U ##	
					100 – 240V~	100V~	240V~	100V~	240V~
GNT212/G2T212	12	16.7A – 200W	8.3A – 100W	12.5A – 150W	16.7A – 200W	9.58A – 115W	14.58A 175W	7.92A – 95W	12.5A – 150W
GNT215/G2T215	15	13.3A – 200W	6.7A – 100W	10A – 150W	13.3A – 200W	7.66A – 115W	11.67A 175W	6.33A – 95W	10A – 150W
GNT218/G2T218	18	11.1A – 200W	5.6A – 100W	8.3A – 150W	11.1A – 200W	6.38A – 115W	9.72A – 175W	5.27A – 95W	8.33A – 150W
GNT224/G2T224	24	8.3A – 200W	4.2A – 100W	6.3A – 150W	8.3A – 200W	4.79A – 115W	7.29A – 175W	3.96A – 95W	6.25A – 150W
GNT228/G2T228	28	7.1A – 200W	3.6A – 100W	5.4A – 150W	7.1A – 200W	4.1A – 115W	6.25A – 175W	3.39A – 95W	5.36A – 150W
GNT236/G2T236	36	5.6A – 200W	2.5A – 90W	3.9A – 140W	5.6A – 200W	2.64A – 95W	3.61A – 130W	1.94A – 70W	3.33A – 120W
GNT248/G2T248	48	4.2A – 200W	1.9A – 90W	2.9A – 140W	4.2A – 200W	1.98A – 95W	2.71A – 130W	1.46A – 70W	2.5A – 120W

\* 200 LFM airflow required over unit. # - Option F – Integral 6.4 CFM fan at 50°C ## - Options L, U, T – Convection Cooled at 40°C

- NOTES:
1. Consult factory for application with convection cooling and usage at higher operating ambient temperature.
  2. Maximum Operating Relative Humidity 96 %, no condensation.
  3. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.
  4. There are 2 Auxiliary outputs from this unit that are not counted against the output rating of the unit  
J3 Pins 1 and 2 – 12V/0.25A Fan Voltage  
J4 Pins 6 and 5 – 5V/0.1A

**CERTIFICATION:** All models are Certified to be in compliance with the applicable requirements of UL 60601-1, CSA 22.2 No. 601.1 (L5M1), EN 60601-1, IEC 60601-1, UL 60950-1, CSA 60950-1 (L5M1), and EN 60950-1.

**CLASSIFICATION:** (5.1) Protection against electric shock = GNT200 Series – Class I G2T200 Series – Class II  
(In accordance with (5.2) Degree of protection against electric shock = Signal output or intermediate sub-clause 5 (5.3) Protection against harmful ingress of water = Ordinary (no protection) of IEC 60601-1) (5.5) Have not been evaluated for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide. This evaluation is to be made on the end equipment by the OEM.  
(5.6) Mode of operation = Continuous



**SAFETY DECLARATION:** SL Power Electronics Corp. declares under our sole responsibility that all models listed above are in conformity with the applicable requirements of EN 60950-1 following the provisions of the Low Voltage Directive 2006/95/EC. They are certified for Pollution Degree 2 environment and Class I TN-S power systems.

# GNT200/G2T200 SERIES INSTALLATION INSTRUCTIONS (Contd)

**GROUNDING: Protection Class I** requires that the chassis and/or Ground tab be bonded to Protective Earth in the end application. Using the ground tab for the end product's protective earthing terminal is not recommended. A separate dedicated protective earthing point should be used.

**Protection Class II** requires that the Input remains ungrounded in the end application.

**OUTPUTS:** The outputs are not acceptable for direct patient connection without additional isolation. The DC outputs are SELV under normal and single fault conditions. The Main DC output is at a Hazardous Energy Level.

**OVERVOLTAGE PROTECTION:** The output is monitored for an overvoltage condition. In some applications where an overvoltage condition could result in a hazard as defined in applicable safety standards, redundant or additional overvoltage protection may be required. Consult factory for details.

**CAUTION:** When performing Dielectric Strength Tests, catastrophic failure of the unit may result if a Dielectric Strength test voltage greater than 1800 V ac is applied between primary and secondary circuits. The components providing isolation from primary to secondary cannot be tested while installed in the power supply without overstressing basic (primary to ground) insulation. All isolating components are individually 100 % tested at 4800 V ac prior to installation.

**ISOLATION:** The creepage distance between primary and secondary circuits is 8 mm minimum. The required creepage and clearance distances from primary to secondary circuits must be maintained after installation to preserve the intended safety.

**TEMPERATURES:** The maximum operating temperatures of certain safety components, as defined in the applicable safety standards, must not be exceeded after installation to preserve the intended safety. The output power, ambient air temperature and the availability, amount, direction and/or restriction of airflow influence the temperatures of these components.

**FUSING:** Fuses for both Line and Neutral are provided in the power supply, rated T 4.0 A/250 V.

**WARNING! RISK OF FIRE!** A blown internal fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by SL Power Electronics Corp. authorized personnel.

**WARNING! SHOCK HAZARD!** Dangerous voltages are present on some components, printed wiring traces and heatsinks.

**MISCELLANEOUS:** G2T200 Installation in an end product requires the use of Plastic attaching hardware and standoffs. This is necessary to keep the required creepage distance between Primary and ground.

The use of an insulator between the PWB Bottom and a metal chassis should be considered.

## CONNECTIONS






J1	AC Input (AMP 640445-3)
1	Line
2	Neutral
Mating connector: Molex 09-50-3031 Pins: Molex 08-52-0112	

J2	DC Output (AMP 640445-6)
1, 2, 3	+ V Out
4, 5, 6	Common
Mating connector: Molex 09-50-3061 Pins: Molex 08-52-0112	

J3	Fan Output (AMP 640456-2)
1	12V @ 0.25A
2	Fan Return (Common)
Mating connector: AMP 1375820-2 Pins: AMP 1375813-3	

### NOTE:

R30 is the Output Voltage Adjust. It is factory set to the value specified in the Model Number

EXPLANATION OF SYMBOLS	
	Alternating Current
	Direct Current
	Attention, Consult Accompanying Documents
	Attention, Dangerous Voltages
	Class II

J4	Signals (MOLEX 22-05-7085)
1	PS Off
2	Inhibit
3	Power OK
4	DC OK
5	Signal Return (Common)
6	+5V @ 0.1A
7	- Sense
8	+ Sense
Mating connector: Molex 50-37-5083 Pins: Molex 08-70-1040 Pin 1 is located at the Top and Pin 8 at the Bottom	

SL Power Electronics Corp. will not be liable for the safety, reliability or performance of these power supplies if a) any changes, modifications or repairs are carried out by other than authorized agents of SL Power Electronics Corp., or b) the installation of the supply is not in accordance with these installation instructions and the applicable UL, CSA, EN/IEC safety standards.