SL POWER ELECTRONICS CORP.
6050 King Drive, Bdlg A
Ventura, CA 93003 + 805-486-4565
Internet: www.slpower.com

GPM55 SERIES
INSTALLATION INSTRUCTIONS

RATINGS Input: 100-240 VAC, 1.7 A, 50/60 Hz
Outputs: 55 Watts Maximum Continuous Power - Total of all Outputs.

Model	Output #1	I_{sc}	Output #2	I_{sc}	Output #3	I_{sc}	Output #4	I_{sc}
GPM55A	+5VDC 6A	4A	+12VDC 3A	4A	+12VDC 1A	3A	-12VDC 1A	3A
GPM55B	+5VDC 6A	4A	+12VDC 3A	4A	-5VDC 1A	3A	-12VDC 1A	3A
GPM55C	+5VDC 6A	4A	+15VDC 3A	4A	-5VDC 1A	3A	-15VDC 1A	3A
GPM55D	+5VDC 6A	4A	+24VDC 1.5A	2A	+12VDC 1A	3A	-12VDC 1A	3A
GPM55E	+5VDC 6A	4A	+24VDC 1.5A	2A	+15VDC 1A	3A	-15VDC 1A	3A
GPM55F	+5VDC 6A	4A	+12VDC 3A	2A	+15VDC 1A	3A	-15VDC 1A	3A
GPM55-5	5VDC 11A	5A						
GPM55-12	12VDC 4.7A	2A						
GPM55-15	15VDC 3.7A	2A						
GPM55-24	24VDC 2.3A	1A						
GPM55-28	28VDC 2.0A	1A						

Notes:
1. I_{sc} = Maximum output short circuit current.
2. Maximum ambient temperature for continuous output power of 55W is 50°C.
3. Maximum Relative Humidity 96%, no condensation.

CE **SAFETY DECLARATION:** SL Power Electronics Corp. (SLPE) declares under our sole responsibility that all models listed above are in conformity with the applicable requirements of EN60950-1 following the provisions of the Low Voltage Directive 2006/95/EC. All models are Certified to be in compliance with the applicable requirements of CSA 22.2 No. 234 (Level 3) (with additional tests to C22.2 No 601.1-M90 per T.I.L. CA-08), EN/IEC/UL 60601-1.

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

CAUTION: When performing Dielectric Strength Tests, catastrophic failure of the unit may result if a Dielectric Strength test voltage greater than 1800 Vac 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 Vac prior to installation.

ISOLATION: The creepage distance between primary and ground is 4 mm minimum; between primary and secondary circuits is 8 mm minimum. Secondary to ground creepage is not defined or controlled. The output common is bypassed to ground using a 0.01µF 1KV capacitor. The required creepage and clearance distances from primary circuits to ground and secondary circuits must be maintained after installation to preserve the intended safety.

GROUNDING: The Protective Earth (ground) terminal J1, pin 1 and all of the pads around the mounting holes must be bonded to Protective Earth in the host equipment. Metallic spacers should be used to mount supply to metal surfaces. When mounting to non-metallic surfaces, connect all mounting pads together and bond to earth. Using the Protective Earth terminal on the supply for grounding the host equipment is not recommended. A separate dedicated grounding point should be used.

OUTPUTS: All output commons should be connected to Protective Earth in the end application. The output(s) are intended for Protectively Earthed Signal Output and Intermediate Circuits only. The output(s) are not acceptable for patient connection without additional isolation. All DC outputs are SELV under normal and single fault conditions.

OVERVOLTAGE PROTECTION: Only output #1 is monitored for an overvoltage condition. The trip-point for a 5 volt output is 5.6 to 6.8 volts. 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.

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.

OVERCURRENT PROTECTION: The internal fuse is located in the phase lead only. EN 60601-1 requires that both supply leads (phase and neutral) be protected against overcurrent. Complete overcurrent protection must be provided in the host equipment. Fuse ratings must not exceed that specified for the internal fuse, must meet the requirements of EN 60601-1 and be acceptable for the country in which the host equipment is to be installed.

WARNING! RISK OF FIRE! A blown internal fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by SLPE authorized personnel. Refer to fuse marking on the supply for rating.

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

EXPLANATION OF SYMBOLS	
~	Alternating Current
⚠	Attention, Consult Accompanying Documents
⚡	Attention, Dangerous Voltages
⏚	Protective Earth (Ground)

C O N N E C T I O N S

J1 AC Input	J2 Multi-Output Models		J2 Single Output Models	
1) Ground	1) Output 2 (+)	6) Common	1) Output 1 (+)	6) Common
3) Neutral	2) Output 2 (+)	7) Common	2) Output 1 (+)	7) Common
5) Line	3) Output 1 (+)	8) Output 4 (-)	3) Output 1 (+)	8) N/C
	4) Output 1 (+)	9) Output 3 (+/-)	4) Output 1 (+)	9) N/C
	5) Common		5) Common	

Mating Connectors	
	Amp Contact 770522-1
J1	Amp Housing 640250-5
J2	Amp Housing 640250-9

CAUTION: Do not exceed 5 Amps per pin on J2.

SLPE 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 SLPE, or b) the installation of the supply is not in accordance with these installation instructions and the applicable UL, CSA, IEC and/or EN safety standards.