

SOLAHD GLT40 Series, GLT40-M Series Installation & Operating Instructions

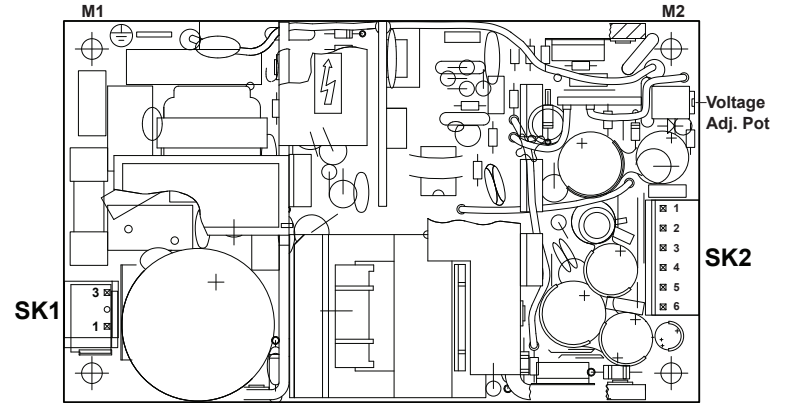
Installation & Safety

To comply with the published safety standards, the following must be observed when using this power supply:

1. Maximum ambient temperature for the power supply must not exceed 50°C.
2. When installing the power supply in the end-use equipment, special attention is required to ensure safety compliance with the following safety standards: UL60950-1, EN60950-1, IEC60950-1, and CSA22.2 No. 60950-1-03 for GLT42, GLT43, GLT44, GLT45, and GLT46; UL60601-1, EN60601-1, IEC60601-1, and CSA22.2 No. 60601-1-M90 for GLT42-M and GLT45-M. The safety requirements include creepage distances, clearances, and distance through insulation between primary wiring and earth or secondary (SELV) wiring.
3. The power supply's rated input voltage is automatically selected. Please refer to the specification sheet for the input voltage range.
4. The maximum output power of the supply must not exceed the rating indicated in the specification sheet.
5. The earth ground wire must be connected only to the point marked with the earth ground symbol (on the unit).
6. Hazardous voltages exist in the primary circuits. Disconnect the power supply before servicing.
7. When operating with a dc input voltage range, the unit input must be protected by a dc rated fuse in the end-use installation system.
8. The internal fuse should only be replaced with a 2.5 A, 250 V ac, type SP0001.1008 manufactured by Schurter AG or type 21602.5 manufactured by Littelfuse.
9. GLT42-M and GLT45-M have no patient applied part.
10. This equipment is considered Class I according to protection against electric shock.
11. This power supply is **CE** marked following the provisions of the Low Voltage Directive, 2006/95/EC.

For technical assistance, contact SolaHD Technical Support at (800) 377-4384 or send an e-mail to tech@solahd.com. Please visit our Web site at www.solahd.com for additional product information and specification sheets.

Mechanical Outline



Connector PIN Designation

Input Connector	PIN	GLT42 (-M)	GLT43	GLT44	GLT45 (-M)	GLT46
SK1	1			Line		
	3			Neutral		
Output Connector	PIN	GLT42 (-M)	GLT43	GLT44	GLT45 (-M)	GLT46
SK2	1		+12 V		+15 V	+24 V
	2			+5 V		
	3					
	4					
	5				Common	
	6		-12 V	-12 V	-5 V	-15 V
SK201	1			+Sense		
	2			-Sense		

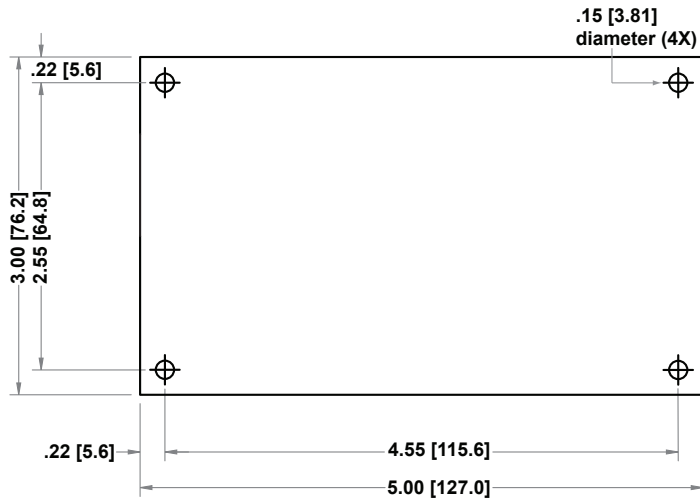
NOTE: Mounting holes M1 and M2 should be grounded for EMI purposes. Mounting hole M1 is an earth ground connection.

Output Ratings

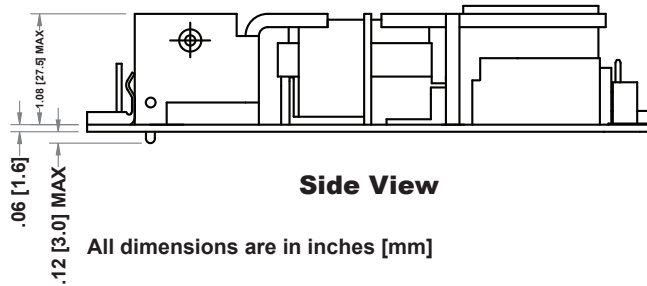
Model	Output Voltage (V)	Convection Cooling		30 CFM Forced Air Cooling	
		Max. Output Current (A)	Max. Output Power (W)	Max. Output Current (A)	Max. Output Power (W)
GLT42 (-M)	+5	4.0	40	5.0	55
	+12	2.0		2.5	
	-12	0.5		0.7	
GLT43	+5	6.0		8.0	
	+12	0.5		0.7	
	-12	0.5		0.7	
GLT44	+5	4.0		5.0	
	+12	2.0		2.5	
	-5	0.5		0.7	
GLT45 (-M)	+5	4.0		5.0	
	+15	2.0		2.5	
	-15	0.5		0.7	
GLT46	+5	4.0	5.0		
	+24	1.0	1.5		
	+12	0.5	0.7		

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Mechanical Dimensions



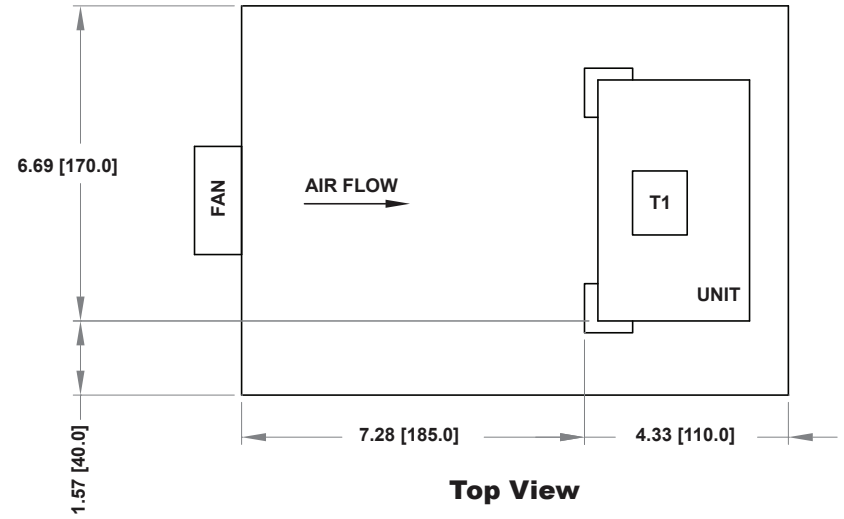
Bottom View



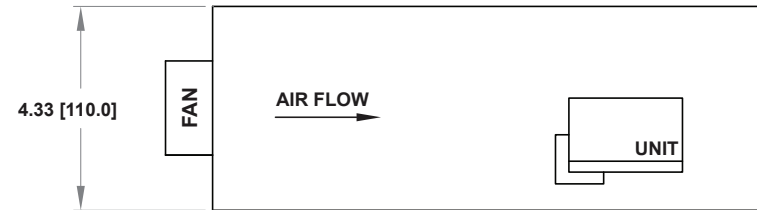
Side View

All dimensions are in inches [mm]

Typical Ventilation Setup



Top View



Side View

Fan: MINEBEA 3110NL-04W-B30

Fan Input: 12 V dc

NOTE: Dimensions and fan used are for reference only



GLT40, GLT40-M Series Specifications

Electrical Specifications

Input	
Input range	85-264 Vac; 120-300 Vdc
Frequency	47-440 Hz
Inrush current	<18 A peak @ 115 Vac; <36 A peak @ 230 Vac, cold start @ 25°C
Input current	1 A max. (RMS) @ 115 Vac
Efficiency	70% typical at full load
EMI	FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B conducted; VDE 0878 PT3 Class B conducted
Safety ground leakage current	<0.5 mA @ 50/60 Hz, 264 Vac input; GLT40-M: <75µA @ 50/60 Hz, 264 Vac input

Output	
Maximum power	40 W convection; 55 W with 30 CFM forced air
Cross regulation	±2% on output 1; ±5% on outputs 2, 3
Adjustment range	-5, +10% minimum
Hold-up time	20 ms @ 40 W load, 115 Vac nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5.7 to 6.7 Vdc on the main output
Minimum Load	0.4 A for first output, 0.2 A for second outputs: GLT42, GLT44, GLT45; 0.5 A for the 1st output of GLT43; 0.4 A for first output, 0.1 A for second outputs: GLT46
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

Environmental Specifications

Operating temperature	0° to 50°C ambient. Derate each output 2.5% per degree from 50° to 70°C; -20°C start up.
Storage temperature	-40°C to 85°C
Temperature coefficient	±.04% per °C
Electromagnetic susceptibility	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3
Humidity	Operating; non-condensing 5% to 95%
Vibration	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational
MTBF demonstrated	>550,000 hours at full load and 25°C ambient conditions

Mating Connectors

AC Input	Molex 09-50-8031 (USA) Not required for (-T) option; 09-91-0300 (UK) PINS: 08-52-0113
DC Outputs	Molex 09-50-8061 (USA) Not required for (-T) option; 09-91-0600 (UK) PINS: 08-52-0113
Remote Sense	Molex 22-01-2025; PINS 08-52-0123

Connector Kit #70-841-006, includes all of the above

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance is ±0.02" (±0.5mm).
- Mounting holes M1 and M2 should be grounded for EMI purposes.
- Mounting hole M1 is safety ground connection.
- Specifications are for convection rating at factory settings at 115 Vac input, 25°C unless otherwise stated.
- Warranty: 2 year
- Weight: 0.5 lb/0.23 kg

Power Derating Curve

