


SOLAHD GLS50 Series, GLS50-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. The power supply has been evaluated for use in 70°C at half load (27.5) for GLS52 only; (30 W) for GLS53, GLS54, GLS55, and GLS58 only.
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 GLS52, GLS53, GLS54, GLS55, and GLS58; UL60601-1, EN60601-1, IEC60601-1, and CSA22.2 No. 60601-1-M90 for GLS52-M, GLS53-M, GLS54-M, GLS55-M, and GLS58-M. The safety requirements include creepage distances, clearances, and distance through insulation between primary wiring and earth or secondary (SELV) wiring.
3. This power supply is approved and certified for the rated voltage range of 100 V ac to 240 V ac.
4. The maximum output power of the supply must not exceed the rating indicated in the specification sheet.
5. The disconnection from the line must be in the end system.
6. The internal fuse should only be replaced with a T3.15AH, 250 V ac, type TE5/392 manufactured by Wickmann.
NOTE: The power supply has a fuse on the neutral line for GLS52-M, GLS53-M, GLS54-M, GLS55-M, and GLS58-M.
7. GLS52-M, GLS53-M, GLS54-M, GLS55-M, and GLS58-M have no patient applied part.
8. This equipment is considered Class I according to protection against electric shock.
9. This power supply is  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.

Output Ratings

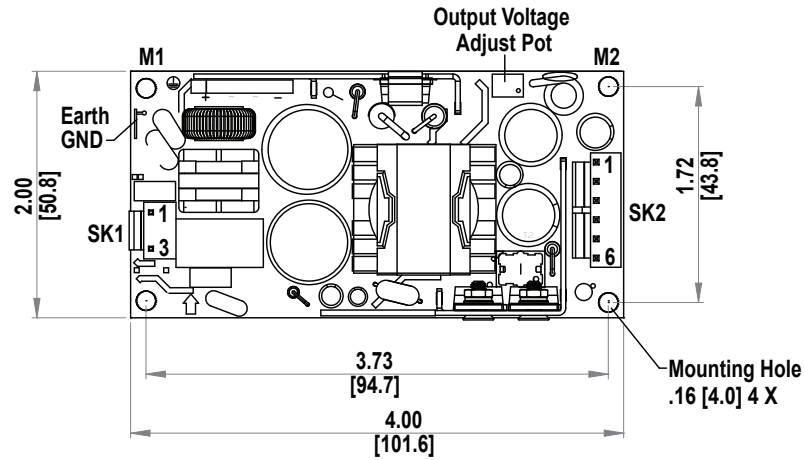
Model	Output Voltage (V)	Convection Cooling	
		Max. Output Current (A)	Max. Output Power (W)
GLS52 (-M)	+5	11.0	55
GLS53 (-M)	+12	5.0	60
GLS54 (-M)	+15	4.0	
GLS55 (-M)	+24	2.5	
GLS58 (-M)	+48	1.25	

Connector PIN Designation

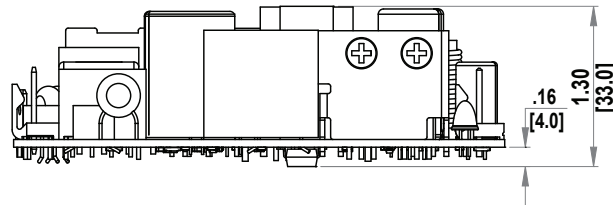
Input Connector	PIN	GLS52 (-M)	GLS53 (-M)	GLS54 (-M)	GLS55 (-M)	GLS58 (-M)
SK1	1	Line				
	3	Neutral				
Output Connector	PIN	GLS52 (-M)	GLS53 (-M)	GLS54 (-M)	GLS55 (-M)	GLS58 (-M)
SK2	1	+5 V	+12 V	+15 V	+24 V	+48 V
	2	+5 V	+12 V	+15 V	+24 V	+48 V
	3	Common				
	4	Common				
	5	-Sense				
	6	+Sense				

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Mechanical Outline & Dimensions



Top View



Side View

All dimensions are in inches [mm].

Maximum screw head diameter is .22" [5.6 mm].

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

CAUTION! Do not accidentally connect the ac connector to the dc output.

GLS50, GLS50-M Series Specifications

Electrical Specifications

Input	
Input range	90-264 Vac (wide range); 127-300 Vdc
Frequency	47-440 Hz
Inrush current	<60 A peak @ 230 Vac, cold start @ 25°C
Input power	< 74 Watts
Efficiency	80 - 85% typical at full load
EMI/RFI	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 for class I; < 0.25 mA @ 50/60 Hz; 264 Vac input for class II GLS50-M: 275 uA @ 50/60 Hz; 264 Vac input
Output	
Maximum power	60 W convection; (GLS52, 55 W)
Adjustment range	±20% minimum
Hold-up time	10/20 ms 115/230 Vac input line
Overload protection	Short circuit protection on all outputs Case overload protected @ 110-160% of normal rating
Overvoltage protection	30-50% above nominal output
Remote sense	Compensates for 0.5 lead V lead drop max. Will operate without remote sense. 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
Electromagnetic susceptibility	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity	Operating; non-condensing 10% to 95% RH
Vibration	IEC68-2-6 to the levels of IEC721-3-2
MTBF demonstrated	> 550,000 hours at full load and 25°C ambient conditions

Mating Connectors	
AC Input	Molex 09-50-8031 (USA); 09-91-0300 (UK) PINS: 08-52-0113
DC Outputs	Molex 09-50-8061 (USA); 09-91-0600 (UK) PINS: 08-52-0113

Connector Kit #70-841-006, includes all of the above	
1. Specifications subject to change without notice.	
2. All dimensions in inches (mm), tolerance is ±0.02" (±0.5mm).	
3. Mounting holes M1 and M2 should be grounded for EMI purposes.	
4. Mounting hole M1 is safety ground connection.	
5. Specifications are for convection rating at factory settings at 115 Vac input, 25°C unless otherwise stated.	
6. Warranty: 2 year	
7. Weight: 0.41 lb/0.18 kg	



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