

GPV-50 series

50W Single Output Switching Power Supply



■ Features:

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over Temperature
- Cooling by free air convection
- Isolation class II
- Class 2 power unit
- Fully encapsulated with IP67 level [5]

  **IP67 SELV**

ELECTRICAL SPECIFICATION

MODEL	GPV-50-12	GPV-50-24
OUTPUT		
RATED VOLTAGE	12V	24V
RATED CURRENT	4A	2A
CURRENT RANGE	0 ÷ 4A	0 ÷ 2A
RATED POWER	48W	
LINE REGULATION	± 1%	
LOAD REGULATION	± 2%	
TOLERANCE [3]	± 3%	
RIPPLE & NOISE (max.) [2]	100mV _{p-p}	200mV _{p-p}
SETUP, RISE TIME [4]	500ms, 250ms / 230VAC; 1000ms, 250ms / 115VAC at full load	
HOLD UP TIME	50ms / 230VAC, 24ms / 115VAC at full load	
INPUT		
VOLTAGE RANGE	90 ÷ 264VAC; 127 ÷ 370VDC	
FREQUENCY RANGE	47 ÷ 63Hz	
EFFICIENCY (typ.)	82%	
AC CURRENT (typ.)	1.0A/115VAC, 0.55A / 230VAC	
INRUSH CURRENT (typ.)	70A / 230VAC, 35A / 115VAC	
LEAKAGE CURRENT (max.)	0.25mA / 240VAC	
PROTECTIONS		
OVER CURRENT	Range: 150 ÷ 200% rated current Type: hiccup mode, auto-recovery.	
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.	
OVER VOLTAGE	13.5 ÷ 18.5V	27 ÷ 33V
	Type: hiccup mode, auto-recovery.	
OVER TEMPERATURE	140°C±10°C (detect on main control IC) Type: shut down output voltage. Recovers automatically after temperature goes down.	

GPV-50 series

50W Single Output Switching Power Supply



WORKING ENVIRONMENT

WORKING TEMPERATURE	-20°C ÷ 70°C (Refer to Derating Curve)
WORKING HUMIDITY	20 ÷ 90% RH non-condensing
STORAGE TEMPERATURE AND HUMIDITY	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing
TEMPERATURE COEFFICIENT	± 0.03% / °C (0°C ÷ 50°C)
VIBRATION	10 ÷ 500Hz, 2G, 10min / cycle, period for 60min. each along X, Y, Z axes

SAFETY AND EMC REGULATIONS

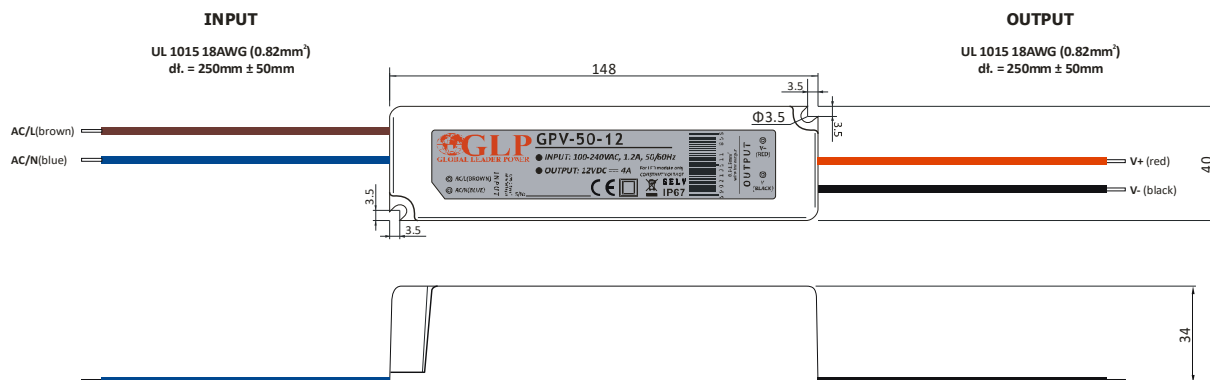
SAFETY STANDARDS	Compliance to EN61347-1, EN61347-2-13, IP67
WITHSTAND VOLTAGE	I-P/O-P: 3kVAC
ISOLATION RESISTANCE	I-P/O-P: 100MΩ/500VDC/25°C/70%
EMC EMISSION	Compliance to EN55015
EMC IMMUNITY	Compliance to EN61547; EN55024; EN61000-4-2, -3, -4, -5, -6, -8, -11
HARMONIC CURRENT	Compliance to EN61000-3-3; EN61000-3-2

OTHERS

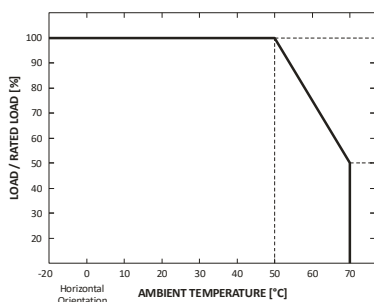
DIMENSIONS	148 x 40 x 34mm (L x W x H)
WEIGHT AND PACKING	0.34kg; 50pcs./ctn; ctn weight and dimensions: 18kg; 34.5 x 26.5 x 19cm

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Suitable for indoor or outdoor use. Please avoid direct exposure to sunlight and immersion in water for over 30 minutes.
6. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

MECHANICAL SPECIFICATION



DERATING CURVE



STATIC CHARACTERISTIC

