# **GPV-18** series

18W Single Output Switching Power Supply





#### ■ Features:

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



### **ELECTRICAL SPECIFICATION**

LEECTRICAL SI ECII ICATION		
MODEL	GPV-18-12	GPV-18-24
ОИТРИТ		
RATED VOLTAGE	12V	24V
RATED CURRENT	1.5A	0.75A
CURRENT RANGE	0 ÷ 1.5A	0 ÷ 0.75A
RATED POWER	18W	18W
LINE REGULATION	± 1%	
LOAD REGULATION	± 2%	
TOLERANCE [3]	± 3%	
RIPPLE & NOISE (max.) [2]	$200 mV_{\text{P-P}}$	400mV <sub>P-P</sub>
SETUP, RISE TIME, HOLDUP TIME [4]	500ms, 250ms, 25ms / 230VAC at full load	
INPUT		
VOLTAGE RANGE	180 ÷ 264VAC; 253 ÷ 370VDC	
FREQUENCY RANGE	47 ÷ 63Hz	
EFFICIENCY (typ.)	82%	84%
AC CURRENT (typ.)	0.3A/230VAC	
INRUSH CURRENT (typ.)	40A / 230VAC	
LEAKAGE CURRENT (max.)	0.25mA / 240VAC	
PROTECTIONS		
OVER CURRENT	Range: 130 ÷ 150% rated current	
	Type: hiccup mode, auto-recovery.	
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.	

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WORKING ENVIRONMENT		
WORKING TEMPERATURE	-30°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	129.5 x 25 x 21mm (L x W x H)	
WEIGHT AND PACKING	0.15kg; 100pcs./box; box weight and dimensions: 13.5kg; 34.5 x 29 x 23cm	
All parameters NOT specially mentioned are measured at 2. Ripple & noise are measured at 20MHz of bandwidth by u 3. Tolerance includes set up tolerance, line regulation and longer to the set of	sing a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.	

### $equipment\ must\ be\ re-qualify\ to\ comply\ with\ EMC\ Directives.$

4. Setup and rise time is measured from 0 to 90% rated output voltage.

INPUT

UL 1015 18AWG (0.82mm²)
dl. = 250mm ± 50mm

129.5

UL 1015 18AWG (0.82mm²)
dl. = 250mm ± 50mm

V+ (red)
V- (black)

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 a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final



