# **GPVP-60** series

60W Constant Voltage LED Power Supply with PFC





### **■**Features:

- Constant voltage design
- Universal AC input range
  - Built-in PFC
- Protections: Overload / Over voltage / Short circuit / Over Temperature
  - Cooling by free air convection
    - Isolation class II
  - Double insulation of Input and output wires
    - IP67 Protection level [5]

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© ELECTRICAL SPECIFICATION			
MODEL	GPVP-60-12N	GPVP-60-24N	
OUTPUT			
Rated Voltage	12V	24V	
Rated Current	5A	2.5A	
Current Range	0 ÷ 5A	0 ÷ 2.5A	
Rated Power	60W		
Line Regulation	± 1%		
Load Regulation	± 2%		
Tolerance [3]	± 3%		
Ripple & Noise (max.) [2]	200mV <sub>P-P</sub>		
Setup, RiseTime [4]	500ms, 15ms / 230VAC at full load		
Hold up Time (typ.)	20ms / 230VAC at full load		

INPUT		
Voltage Range	90 ÷ 264VAC; 127 ÷ 370VDC	
Frequency Range	47 ÷ 63Hz	
Efiiciency (typ.)	85%	86%
AC Current (typ.)	0.8A / 115VAC, 0.4A / 230VAC	
Power Factor (typ.)	PF > 0.9 / 230VAC; PF > 0.95 / 115VAC	
Leakage Current (max.)	0.75mA / 240VAC	

PROTECTIONS			
Overload	Range: 110-150% rated power		
	Type: hiccup mode, auto-reco	very.	
Short Circuit	Type: hiccup mode, auto-reco	very.	
Over Voltage	Range: 14-19V	Range: 28-39V	
	Type: hiccup mode, auto-reco	very.	
Over Temperature	140°C±10°C(detect on main co	entrol IC)	
	Type: shut off, re-power on to	recovery	

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WORKING ENVIRONMENT		
Working Temperature	-30°C ÷ 70°C (refer to Derating Curve), ta: 50°C; tc: 90°C	
Working Humidity	20 ÷ 90% RH non-condensing	
Storage Temperature and Humidity	-30°C ÷ 80°C, 10 ÷ 95% RH non-condensing	

SAFETY and EMC REGULATIONS		
Safety Standards	Compliance to EN 61347-1, EN 61347-2-13	
Withstand Voltage	IN/OUT: 3kVAC	
Isolation Resistance	IN/OUT: 100MΩ/500VDC/25°C/70%	
EMC Emission	Compliance to EN55015	
EMC Immunity	Compliance to EN61547	
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2 class C (for load > 60%)	

OTHERS	
DIMENSIONS	168 x 44 x 34mm (L x W x H)
Weight	260g

EAN





- 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  $12^n$  twisted pair-wire terminated with a  $0.1\mu F$  i  $47\mu F$  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.
- $5. \, \textit{Suitable for indoor or outdoor use. Please avoid direct exposure to sunlight and immersion in water for over 30 \, minutes.}$
- 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.

# INPUT 18AWG (0.82mm') length = 250mm ± 50mm AC/Librown) AC/N(blue) V- (red) 3.5 V- (red) V- (red) V- (bluck)

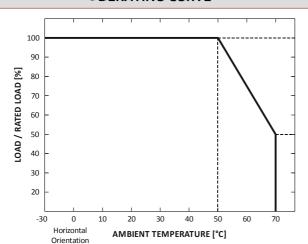
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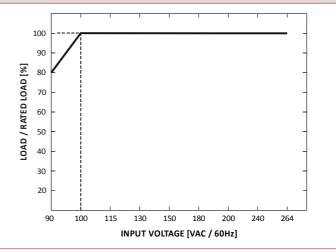
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## **ODERATING CURVE**



## **STATIC CHARACTERISTIC**



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