

# GPV-150 series

150W Constant Voltage LED Power Supply



## ■ Features:

- Constant voltage design
- European AC input range
- Protections: Overload / Over voltage / Short circuit / Over Temperature
- Cooling by free air convection
- Isolation class II
- TUV certificate
- IP67 Protection level [5]

tc: 80°C

ta: 50°C CONSTANT VOLTAGE SELV



## © ELECTRICAL SPECIFICATION

MODEL	GPV-150-12N	GPV-150-24
OUTPUT		
RATED VOLTAGE	12V	24V
RATED CURRENT	12.5A	6A
CURRENT RANGE	0 ÷ 12.5A	0 ÷ 6A
RATED POWER	150W	144W
LINE REGULATION	± 2%	
LOAD REGULATION	± 2%	
TOLERANCE [3]	± 5%	
RIPPLE & NOISE (max.) [2]	300mV <sub>p-p</sub>	400mV <sub>p-p</sub>
SETUP, RISE TIME [4]	500ms, 50ms / 230VAC at full load	
HOLD UP TIME	18ms / 230VAC at full load	

## INPUT

VOLTAGE RANGE	180 ÷ 277VAC; 254 ÷ 390VDC					
FREQUENCY RANGE	47 ÷ 63Hz					
EFFICIENCY (typ.)	92%			89%		
AC CURRENT (typ.)	1.7A / 230VAC					
INRUSH CURRENT (typ.)	50A / 230VAC; T <sub>WIDTH</sub> (50% peak) = 1200μs					
Max. No. Of PSU on Circuit Breaker	B10	B16	C10	C16	D10	D16
	2	4	2	4	5	6
LEAKAGE CURRENT (max.)	0.25mA / 240VAC					

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## PROTECTIONS

<b>OVER CURRENT</b>	Range: 110 ÷ 180% rated current	
	Type: hiccup mode, auto-recovery.	
<b>SHORT CIRCUIT</b>	Type: hiccup mode, auto-recovery.	
<b>OVER VOLTAGE</b>	18 ÷ 30V	27 ÷ 40V
	Type: hiccup mode, auto-recovery.	
<b>OVER TEMPERATURE</b>	Range: 110°C ± 10°C	
	Type: shut down output voltage. After temperature goes down re-power on to recovery.	

## WORKING ENVIRONMENT

<b>WORKING TEMPERATURE</b>	-20°C ÷ 70°C (Refer to Derating Curve)
<b>WORKING HUMIDITY</b>	20 ÷ 9,% RH non-condensing
<b>STORAGE TEMPERATURE AND HUMIDITY</b>	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing
<b>TEMPERATURE COEFFICIENT</b>	± 0.03% / °C (0°C ÷ 50°C)
<b>VIBRATION</b>	10 ÷ 500Hz, 5G, 12min / cycle, period for 72min. each along X, Y, Z axes

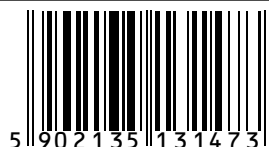
## SAFETY AND EMC REGULATIONS

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

## OTHERS

<b>Lifetime</b>	50 000 hours at 230VAC input, ambient temperature 25°C, full load
<b>DIMENSIONS</b>	203 x 70 x 45mm (L x W x H)
<b>WEIGHT AND PACKING</b>	1.15kg; 15pcs./ctn; ctn weight and dimensions: 18kg; 45.5 x 29.5 x 19cm

**EAN Code**



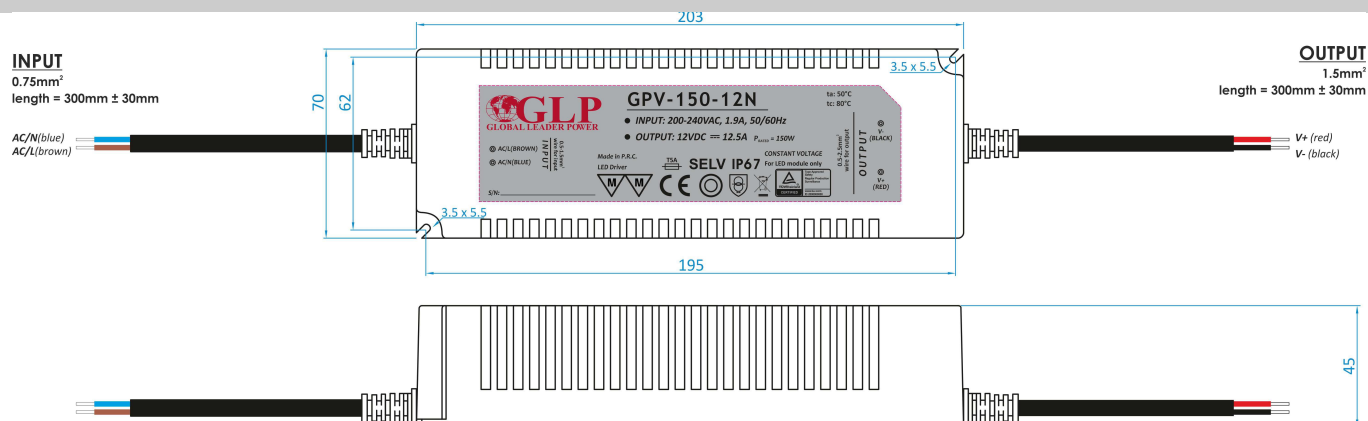
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation 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 a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

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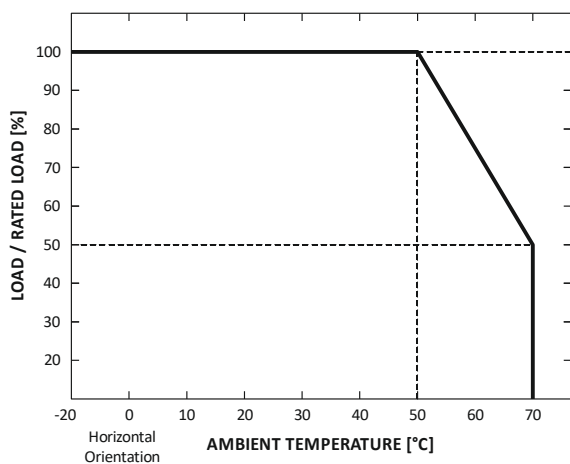
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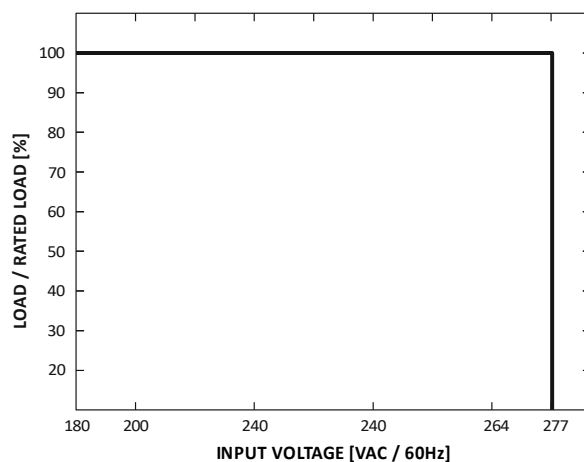
## © MECHANICAL SPECIFICATION



## © DERATING CURVE



## © STATIC CHARACTERISTIC



## © LIFETIME vs. AMBIENT TEMPERATURE CURVE

