# **Model: GP-HS10P Series** (12 Watts single output)

#### ■ Features

- Universal AC Input 90~264VAC.
- Constant Current Design.
- For High Brightness Light-Emitting Diode Products.
- Fully Isolated Plastic Case.
- Operation from -20°C ~60°C Full Load.
- Protections: OTP / SCP.
- Class II Power Design Without Earth Pin.
- IP67 Class.

### ■ Approvals









#### ■ Size

110 \* 35 \* 25 mm (L\*W\*H)



#### **■** Specifications

| Model No. |                     | GP-HS10P-12C        | GP-HS10P-24C | GP-HS10P-24C2 |  |
|-----------|---------------------|---------------------|--------------|---------------|--|
| Output    | DC Voltage          | 12V                 | 24V          | 27V           |  |
|           | Rated Current Range | 1000mA              | 500mA        | 350mA         |  |
|           | Rated Max. Power    | 12W                 | 12W          | 9.5W          |  |
|           | Efficiency          | 81%                 | 83%          | 82%           |  |
|           | DC Voltage Range    | 8 ~ 12V             | 14 ~ 24V     | 14 ~ 27V      |  |
|           | Current Tolerance   | ±5%                 | ±5%          | ±5%           |  |
|           | Set up Time (Max)   | <500ms at full load |              |               |  |
|           |                     |                     |              |               |  |

| Model No.   | 46                      | GP-HS10P-36C1  | GP-HS10P-36C2 | GP-HS10P-48C | GP-HS10P-48C1 |  |
|-------------|-------------------------|--|---------------|--------------|---------------|--|
| Output      | DC Voltage              | 36V  | 36V           | 48V          | 48V           |  |
|             | Rated Current Range     | 270mA  | 350mA         | 250mA        | 270mA         |  |
|             | Rated Max. Power        | 9.7W   | 12.6W         | 12W          | 12.9W         |  |
|             | Efficiency              | 81%  | 83%           | 84%          | 81%           |  |
|             | DC Voltage Range        | 24 ~ 36V   | 20 ~ 36V      | 26 ~ 48V     | 26 ~ 48V      |  |
|             | Current Tolerance       | ±5%  | ±5%           | ±5%          | ±5%           |  |
|             | Set up Time (Max)       | <500ms at full load  |               |              |               |  |
|             | Rated Voltage           | 100 ~ 240VAC 141 ~ 340VDC  |               |              |               |  |
|             | Voltage Range           | 90VAC ~ 264VAC   |               |              |               |  |
|             | Frequency Range         | 47 Hz ~ 63 Hz  |               |              |               |  |
| Input       | Power Factor Correction | $\geq$ 0.88/120VAC , $\geq$ 0.8/240VAC   |               |              |               |  |
|             | AC Current              | 0.2A at 115VAC / 0.1A at 230VAC  |               |              |               |  |
|             | Inrush Current          | 11A at 115VAC / 15A at 230VAC  |               |              |               |  |
|             | Leakage Current         | <0.25mA / 230VAC   |               |              |               |  |
| Protections | Over Temperature        | Tc: 95°C ± 10°C; Type: Hiccup Mode   |               |              |               |  |
|             | Short Circuit           | Type : Hiccup Mode   |               |              |               |  |
|             | Operation Temp.         | -20°C ~60°C full load. (Refer to output load derating curve)                   |               |              |               |  |
| Environment | Operation Humidity      | 20% ~ 95% RH non-condensing.   |               |              |               |  |
|             | Storage Temp.           | -40 ~ +80°C  |               |              |               |  |
|             | Storage Humidity        | 10% ~ 95% RH   |               |              |               |  |
|             | Vibration               | 10 ~ 500 Hz, 2G 10 min. / 1 cycle, period for 60 min. each along X, Y, Z axes. |               |              |               |  |





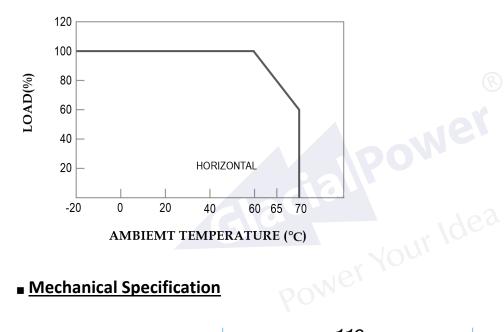






| Safety & EMC | Safety Standards   | meet EN61347-1,EN61347-2-13,UL8750 refer 1310 |  |  |
|--------------|--|---|--|--|
|              | Withstand Voltage  | I/P - O/P: 3.75 KVAC                          |  |  |
|              | Isolation Resistance   | I/P-O/P :100m ohms / 500VDC at 25°C           |  |  |
|              | EMI Conduction & Radiation   | meet EN55015,FCC part15 B                     |  |  |
|              | EMS Immunity   | meet EN61000-4-2, 3, 4, 5, 6, 8, 11 , EN61547 |  |  |
| Othors       | MTBF   | 200K hours min.MIL-HDBK-217F(25°C)            |  |  |
| Others       | Dimension(L x W x H)   | 110 x 35 x 25mm; 136.2g/pcs                   |  |  |
| Remark       | <ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHZ bandwidth oscilloscope and with 0.1uf &amp; 47uf parallel capacitor.</li> </ol> |   |  |  |
|              | 3. The power supply is considered a component which will be installed a final equipment. The final   |   |  |  |
|              | equipment must be re-confirmed that it still meets EMC directives.   |   |  |  |

#### **■** Derating Curve



## **■** Mechanical Specification

