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洋鑫科技股份有限公司 Glacialtech Inc. www.glacialtech.com

#### Model: **GP-LS150P Series**

## Features:

- \* Universal AC input 90~305Vac.
- \* Constant Voltage / Constant Current Operation.
- Suitable for High Brightness Light-Emitting Diode products. \*
- \* Built-in ACTIVE PFC Function.
- \* Protections: OVP / OCP / SCP / OTP.
- \* IP67 design for indoor or outdoor installations
- Cooling by free air convection.
  \* Optional Timer Dimming For Power Saving.



#### Size : 222 \* 68 \* 39 mm (L\*W\*H)



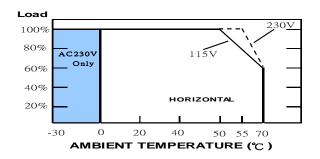
## **Specifications:**

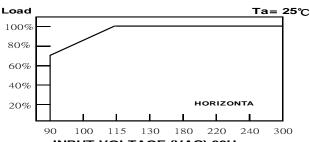
#### LS150P-xx(A) : xx for O/P Voltage, A for Timer Dimming

|                 | Model No.   | LS150P-12(A)  | LS150P-15(A)             | LS150P-24(A)           | LS150P-30(A) | LS150P-36(A) | LS150P-48(A) | LS150P-54(A) |
|-----------------|---|---|--------------------------|------------------------|--------------|--------------|--------------|--------------|
|                 | DC Voltage  | 12V   | 15V                      | 24V                    | 30V          | 36V          | 48V          | 54V          |
| Output          | Constant Current Region Note.4  | 9~12V   | 10~15V                   | 14~24V                 | 22 ~ 30V     | 26 ~ 36V     | 34 ~ 48V     | 38 - 54V     |
|                 | Rated Current   | 11A   | 10~15 V<br>10A           | 6.3A                   | 5A           | 4.2A         | 3.2A         | 2.8A         |
|                 | Current Tolerance   | ПА  | 10/4                     | 0.3A                   | +5%, -5%     | 4.2/1        | 3.2A         | 2.04         |
|                 | Rated Power   | 132W  | 150W                     | 151.2W                 | +5 %, -5 %   | 151.2W       | 153.6W       | 151.2W       |
|                 |   |   |                          |                        |              |              |              |              |
|                 | Ripple&Noise(Max.) Note.2   | 150mV   | 150mV                    | 150mV                  | 150mV        | 150mV        | 200mV        | 300mV        |
|                 | Efficiency at 230Vac(Typ.)  | 88%   | 88%                      | 90%                    | 90%          | 90%          | 90.0%        | 90.0%        |
|                 | Voltage Tolerance Note.3  | -1%~5%  | -1%~5%                   | -1%~5%                 | -1%~5%       | -1%~5%       | -1%~5%       | -1%~5%       |
|                 | Set up time (Max.)  | 0.8s / 230Vac, 1.0s / 115Vac, at full load.   |                          |                        |              |              |              |              |
| Input           | Voltage Range   | 90 ~ 305Vac / 127 ~ 430Vdc  |                          |                        |              |              |              |              |
|                 | Frequency Range   | 47 Hz ~ 63 Hz   |                          |                        |              |              |              |              |
|                 | AC Current (Max.)   | 2A at 115Vac / 1A at 230Vac   |                          |                        |              |              |              |              |
|                 | Power Factor  | >0.98 at 115 Vac / >0.95 at 230Vac at full load. PF ≧0.9 at 75% load                              |                          |                        |              |              |              |              |
|                 | Inrush Current (Max.)   | COLD START 65A at 230 Vac   |                          |                        |              |              |              |              |
|                 | Leakage Current   | <0.5mA / 240 Vac  |                          |                        |              |              |              |              |
| Protections     | Over Current  | 95~105% rated current.<br>Type: Auto-recovery after fault condition disappeared.                  |                          |                        |              |              |              |              |
|                 | Short Circuit   | Type: Hiccup mode & recovers after fault condition disappeared.                                   |                          |                        |              |              |              |              |
|                 | Over Voltage  | 14~20V<br>Type: Latch mo  | 17~23V<br>de(re-power on | 26~32V<br>to recover). | 33~41V       | 40~50V       | 52~60V       | 62-74V       |
|                 |   | Tcase: 95°C+10°C  |                          |                        |              |              |              |              |
|                 | Over Temperature  | er Temperature Type: Shutdown mode(re-power on to recover).                                       |                          |                        |              |              |              |              |
| Environment     | Operation Temp. Note.5  | -30°C~70°C (Refer to output load derating curve)  |                          |                        |              |              |              |              |
|                 | Operation Humidity  | 20% ~ 90% RH non-condensing.  |                          |                        |              |              |              |              |
|                 | Storage Temp.   | -40 ~ +80 ℃   |                          |                        |              |              |              |              |
|                 | Storage Humidity  | 10% ~ 90% RH  |                          |                        |              |              |              |              |
|                 | Vibration   | 10-500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.                        |                          |                        |              |              |              |              |
| Safety &<br>EMC | Safety Standards  | UL8750(except 15V/54V),UL60950(except 15V/54V),EN61347-1,EN61347-2-13 ,independent;IP67 Approved. |                          |                        |              |              |              |              |
|                 | Withstand Voltage   | I/P-O/P: 3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC  |                          |                        |              |              |              |              |
|                 | Isolation Resistance  | I/P-O/P,I/P-FG,O/P-FG:100M ohms / 500VDC at 25 °C   |                          |                        |              |              |              |              |
|                 | EMI Conduction & Radiation  | Compliance to EN55015,FCC part 15   |                          |                        |              |              |              |              |
|                 | Harmonic Current  | Compliance to EN61000-3-2 Class C( ≥75% load),EN61000-3-3   |                          |                        |              |              |              |              |
|                 | EMS Immunity  | Compliance to EN61000-4-2,3,4,5,6,11;EN61547, Light industry level,criteria A                     |                          |                        |              |              |              |              |
| Others          | MTBF  | 200K hours min. MIL-HDBK-217F(25°C)   |                          |                        |              |              |              |              |
|                 | Dimension(L*W*H)  | 222*68*39 mm  |                          |                        |              |              |              |              |
|                 | Packing(L*W*H)/Carton   | 548*275*141 mm  |                          |                        |              |              |              |              |
|                 | Weight  | 940g  |                          |                        |              |              |              |              |
| Note            | <ol> <li>All specifications not specially mentioned are measured at 230Vac and 25℃ ambient temperature.</li> <li>Ripple &amp; Noise are measured at 200Hz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf &amp; 47uf parallel capacitor.</li> <li>Voltage Tolerance: includes line regulation, load regulation and set-up tolerance.</li> <li>Constant current operation region is within 75%-100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</li> <li>Please refer to derating curve.</li> </ol> |   |                          |                        |              |              |              |              |

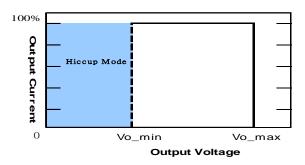
Rev:X10

# **Derating Curve**

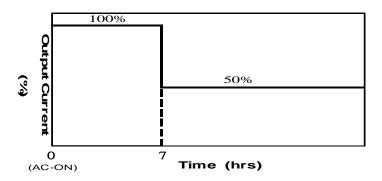




INPUT VOLTAGE (VAC) 60Hz

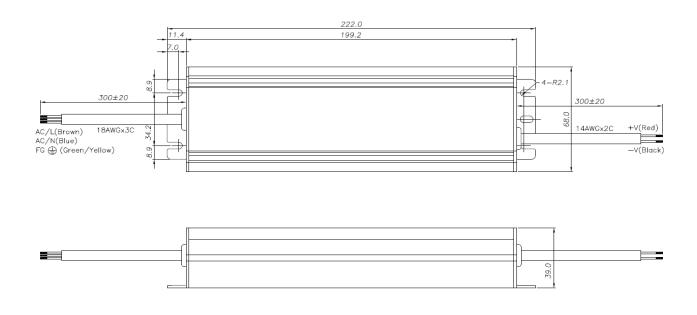


Timer Dimming



Note: The output current will return to 100% after the AC voltage is removed for a while and ON again.

# **Mechanical Specification**



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