

HLG-100W series Single Output Switching Power Supply



Features:

Universal AC input / Full range

Built-in active PFC function

Protections: Short circuit / Over current / Over voltage / Over temperature

Cooling by free air convection

OCP point adjustable through output cable or internal potentiometer

IP67 / IP65 design for indoor or outdoor installations

Suitable for LED lighting and moving sign applications

Compliance to worldwide safety regulations for lighting

Suitable for dry / damp / wet locations

3 years warranty

SPECIFICATION

Dimension: $170 \times 68 \times 40$ mm

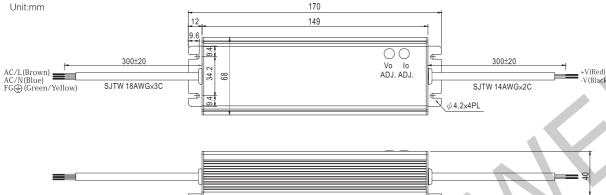
IP65

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|-------------|--------------------------|--|------------|------------|------------|------------|------------|------------|-----------|
| | Model | HLG-100-12 | HLG-100-20 | HLG-100-24 | HLG-100-30 | HLG-100-36 | HLG-100-42 | HLG-100-48 | HLG-100-5 |
| OUTPUT | DC VOLTAGE | 12V | 20V | 24V | 30V | 36V | 42V | 48V | 54V |
| | CONSTANT CURRENT REGION | 6~12V | 10~20V | 12~24V | 15~30V | 18~36V | 21~42V | 24~48V | 27~54V |
| | RATED CURRENT | 5A | 4.8A | 4A | 3.2A | 2.65A | 2.28A | 2A | 1.77A |
| | RATED POWER | 60W | 96W | 96W | 96W | 95.4W | 95.76W | 96W | 95.58W |
| | RIPPLE & NOISE (max.) | 150mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 200mVp-p | 200mVp-p | 200mVp-p | 200mVp-p |
| | VOLTAGE ADJ. RANGE | 10.8~13V | 17~22V | 22~27V | 27~33V | 33~40V | 38~46V | 43~53V | 49~58V |
| | CURRENT ADJ. RANGE | Can be adjusted by internal potentiometer or through output cable | | | | | | | |
| | | 3~5A | 3~4.8A | 2.5~4A | 2~3.2A | 1.7~2.65A | 1.4~2.28A | 1.2~2A | 1.1~1.77A |
| | VOLTAGE TOLERANCE | ± 3% | ± 1% | ± 1% | ± 1% | ± 1% | ± 1% | ± 1% | ± 1% |
| | SETUP, RISE HOLD UP TIME | 2500ms,50ms,16ms/115VAC. 230VAC(at full load) | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 305 VAC 47 ~ 63Hz, 127 ~ 370VDC | | | | | | | |
| | AC CURRENT (Typ.) | 1.2A/115VAC 0.55A/230VAC | | | | | | | |
| | POWER FACTOR (Typ.) | PF > 0.95/230VAC PF > 0.98/115VAC(at full load) | | | | | | | |
| | EFFICIENCY (Typ.) | 90% | 93% | 93% | 93% | 93% | 93% | 93% | 93% |
| | INRUSH CURRENT (Typ.) | COLD START 70A/230VAC | | | | | | | |
| | LEAKAGE CURRENT | 0.75mA/240VAC | | | | | | | |
| PROTECTION | OVER CURRENT | 95~106% | | | | | | | |
| | | Protection type: Constant current limiting, recovers automatical ly after fault condition is removed | | | | | | | |
| | SHORT CIRCUIT | Hiccup mode, recovers automatically after fault condition is remove | | | | | | | |
| | OVER VOLTAGE | 14~17V | 23 ~ 27V | 28 ~ 34V | 34 ~ 38V | 41 ~ 46V | 47 ~ 53V | 54 ~ 60V | 59 ~ 65V |
| | | Protection type: Shut down o/p voltage, re-power on to recover | | | | | | | |
| | OVER TEMPERATURE | 100°C ± 10°C(RTH2) | | | | | | | |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | |
| | WORKING TEMP. | $-30^{\circ}\text{C} \sim +60^{\circ}\text{C}; 20\% \sim 90\%\text{RH}(\text{Please refer to "derating curve"})$ | | | | | | | |
| ENVIRONMENT | STORAGE TEMP., HUMIDITY | -40°C ~ +80°C;10% ~ 95%RH Non-condensing | | | | | | | |
| | VIBRATION | 10~500Hz, 2G 10min./1Cycle, Period for 60min, Each axes | | | | | | | |
| | SAFETY STANDARD | UI1310 Class2, TUV EN61347-1,EN61347-2-13,CAN/CSA C22.2 NO.223-M91(exceptfor 48V), IP65 approved | | | | | | | |
| SAFETY & - | WITHSTAND VOLTAGE | I/P-O/P: 3.75KVAC, I/P-FG: 1.5KVAC, O/P-FG: 0.5KVAC | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P: 100M Ohms/500VDC | | | | | | | |
| | EMC EMISSION | Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3 | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A | | | | | | | |
| OTHERS - | DIMENSION | 170*68*40 (L*W*H) | | | | | | | |
| | PACKING | 1kg/20pcs/21kg/1.07CUFT | | | | | | | |
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NOTE

- 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 0.1uf & 47uf parallel capacitor.
 3. Tolerance: includes set up tolerance, line regulation and load regulation.
 4. Constant current operation region is within 60% ~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.
 5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
 6. Safety and EMC design refer to EN60598–1, CNS15233, GB7000.1, FCC part18.
 7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.

Mechanical specification

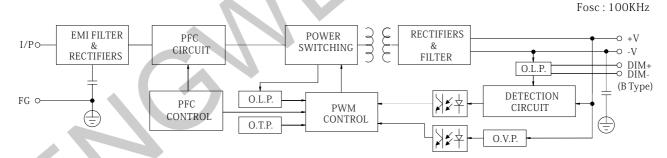


※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer. (Can access by removing the rubber stopper on the case.)

lead-out wire assignment

| Input(Black | (three-core) | Output (Black two-core) | | | |
|--------------|--------------|-------------------------|--------------|--|--|
| Brown | AC/L | Red | DC OUTPUT +V | | |
| Blue | AC/N | Black | DC OUTPUT -V | | |
| Yellow-green | FG ± | | | | |

Block diagram



Static characteristic

Derating curve

