

## 150W Single Output Switching Power Supply

110/

F

<u>M/</u>



8

### Features :

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- High efficiency up to 94%
- 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
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and street lighting applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.10)



HLG-150H series



HLG-150H-15A

A : IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.

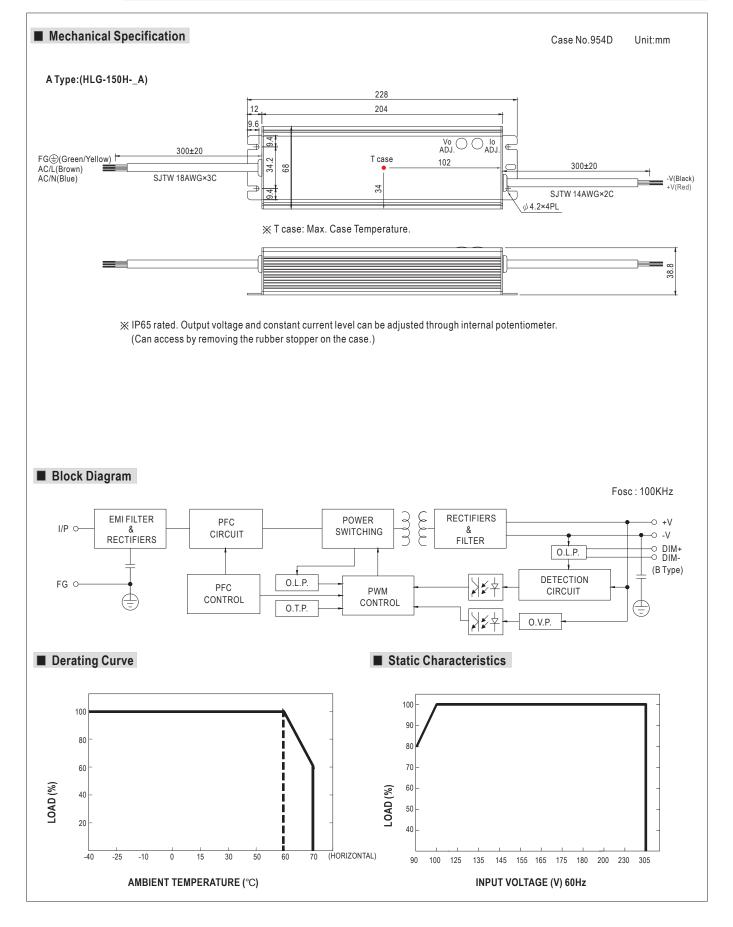
M SELV IP65

#### SPECIFICATION

| MODEL           |   | HLG-150H-15A  |
|-----------------|---|---|
| -               | DC VOLTAGE  | 15V   |
| OUTPUT          | CONSTANT CURRENT REGION Note.4  |   |
|                 | RATED CURRENT   | 10A   |
|                 | RATED POWER   | 150W  |
|                 | RIPPLE & NOISE (max.) Note.2  |   |
|                 | VOLTAGE ADJ. RANGE Note.6   |   |
|                 | VOLIAGE ADJ. KANGE NOTE.6   |   |
|                 | CURRENT ADJ. RANGE  | Can be adjusted by internal potentiometer A type only   |
|                 |   | 6~10A   |
|                 | VOLTAGE TOLERANCE Note.3  |   |
|                 | LINE REGULATION   | ±0.5%   |
|                 | LOAD REGULATION   | ±1.5%   |
|                 |   | 1000ms,50ms/115VAC 500ms,50ms/230VAC at full load ; B type 1000ms,200ms/115VAC 500ms,200ms/230VAC at 95% load   |
|                 | HOLD UP TIME (Typ.)   | 16ms at full load 230VAC / 115VAC   |
| INPUT           | VOLTAGE RANGE Note.5  | 90 ~ 305VAC 127 ~ 431VDC  |
|                 | FREQUENCY RANGE   | 47 ~ 63Hz   |
|                 | POWER FACTOR (Typ.)   | PF>0.98/115VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)   |
|                 | TOTAL HARMONIC DISTORTION   | THD< 20% when output loading≧60% at 115VAC/230VAC input and output loading≧75% at 277VAC input  |
|                 | EFFICIENCY (Typ.)   | 92%   |
|                 | AC CURRENT (Typ.)   | 1.7A/115VAC 0.75A/230VAC 0.7A/277VAC  |
|                 | INRUSH CURRENT (Typ.)   | COLD START 65A(width=42µs measured at 50% Ipeak) at 230VAC  |
|                 | LEAKAGE CURRENT   | <0.75mA/277VAC  |
| PROTECTION      | OVER CURRENT  | 95 ~ 108%   |
|                 |   | Protection type : Constant current limiting, recovers automatically after fault condition is removed  |
|                 | SHORT CIRCUIT   | Constant current limiting, recovers automatically after fault condition is removed  |
|                 |   | 14~17V 18~21V 23~27V 28~34V 34~38V 41~46V 47~53V 54~63V 59~65V  |
|                 | OVER VOLTAGE  | Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery   |
|                 | OVER TEMPERATURE  | Shut down o/p voltage, recovers automatically after temperature goes down   |
|                 |   | $-40 \sim +70^{\circ}$ C (Refer to "Derating Curve")  |
|                 | WORKING TEMP.   |   |
|                 | WORKING HUMIDITY  | 20 ~ 95% RH non-condensing  |
|                 | STORAGE TEMP., HUMIDITY   | -40 ~ +80°C, 10 ~ 95% RH  |
|                 | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C)  |
|                 | VIBRATION   | 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes   |
| SAFETY &<br>EMC | SAFETY STANDARDS Note.7   | UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent IP65 or IP67, J61347-1, J61347-2-13 approved ; design refer to UL60950-1, TUV EN60950-1 |
|                 | WITHSTAND VOLTAGE   | I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC  |
|                 | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH   |
|                 | EMC EMISSION  | Compliance to EN55015, EN55022 (CISPR22) Class B, 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          | MTBF  | 192.2Khrs min. MIL-HDBK-217F (25°C)   |
|                 | DIMENSION   | 228*68*38.8mm   |
|                 | PACKING   | 1.15Kg; 12pcs/14.8Kg/0.74CUFT   |
| NOTE            | <ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>Please refer to "DRIVING METHODS OF LED MODULE".</li> <li>Derating may be needed under low input voltages. Please check the static characteristics for more details.</li> <li>A type only.</li> <li>Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18.</li> <li>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.</li> <li>The 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 manufacturers must re-qualify EMC Directive on the complete installation again.</li> <li>Refer to warranty statement.</li> <li>To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.</li> </ol> |   |



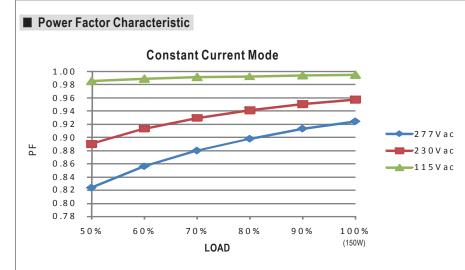
# HLG-150H series





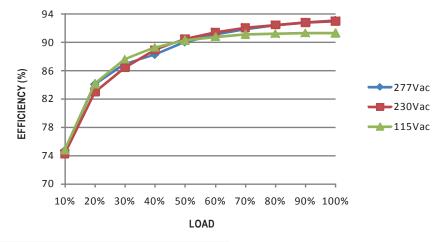
## 150W Single Output Switching Power Supply

## HLG-150H series



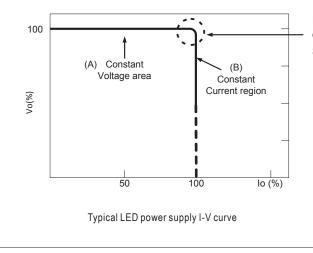
### EFFICIENCY vs LOAD (48V Model)

HLG-150H series possess superior working efficiency that up to 94% can be reached in field applications.



### DRIVING METHODS OF LED MODULE

There are two major kinds of LED drive method "direct drive" and "with LED driver". A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs. Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.



# HLG-150H series

#### WATERPROOF CONNECTION

#### $\odot$ Waterproof connector

Waterproof connector can be assembled on the output cable of HLG-150H to operate in dry/wet/damp or outdoor environment.

