



VOLTAGE

24V

CURRENT

4.00A

POWER

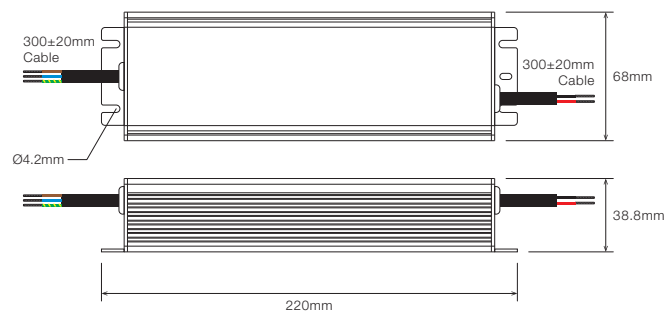
96W

Mean Well 100W Single Output Switching Power Supply

FEATURES

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- High efficiency up to 93%
- 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
- Class 2 power unit
- 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
- 7 years warranty

DIMENSIONS



■ TECHNICAL SPECIFICATIONS

| Model | | HLG-100H-20 | HLG-100H-24 | HLG-100H-30 | HLG-100H-36 | HLG-100H-42 | HLG-100H-48 | HLG-100H-54 |
|-----------------|---|---|--------------------------------|----------------------|----------------------------|----------------|--------------------------------|-------------|
| Output | DC Voltage | 20V | 24V | 30V | 36V | 42V | 48V | 54V |
| | Constant Current Region ⁴ | 10 – 20V | 12 – 24V | 15 – 30V | 18 – 36V | 21 – 42V | 24 – 48V | 27 – 54V |
| | Rated Current | 4.8A | 4A | 3.2A | 2.65A | 2.28A | 2A | 1.77A |
| | Rated Power | 96W | 96W | 96W | 95.4W | 95.76W | 96W | 95.58W |
| | Ripple & Noise (max.) ² | 150mVp-p | 150mVp-p | 200mVp-p | 200mVp-p | 200mVp-p | 200mVp-p | 200mVp-p |
| | Voltage Adj. Range ³ | 17 – 22V | 22 – 27V | 27 – 33V | 33 – 40V | 38 – 46V | 43 – 53V | 49 – 58V |
| | Current Adj. Range | Can be adjusted by internal potentiometer A type only | | | | | | |
| | | 3 – 4.8A | 2.5 – 4A | 2 – 3.2A | 1.65 – 2.65A | 1.4 – 2.28A | 1.25 – 2A | 1.1 – 1.77A |
| | Voltage Tolerance ³ | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | Load Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | Setup, Rise Time ³ | 1200ms,50ms/115VAC | 500ms,50ms/230VAC at full load | | B type 1200ms,200ms/115VAC | | 500ms,200ms/230VAC at 95% load | |
| Hold Up Time | 16ms at full load | 230VAC /115VAC | | | | | | |
| Input | Voltage Range | 90 – 305VAC | | 127 – 431VDC | | | | |
| | Frequency Range | 47 – 63Hz | | | | | | |
| | Power Factor | PF>0.98/115VAC, PF>0.95/230VAC, PF>0.93/277VAC 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.) | 93% | 93% | 93% | 93% | 93% | 93% | 93% |
| | AC Current (Typ.) | 1.2A / 115VAC | 0.55A / 230VAC | | 0.5A / 277VAC | | | |
| | Inrush Current (Typ.) | COLD START 60A (twidth=415μs measured at 50% Ipeak) at 230VAC | | | | | | |
| Leakage Current | <0.75mA / 277VAC | | | | | | | |
| Protection | Over Current ⁴ | 95 – 106% | | | | | | |
| | | Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | |
| | Short Circuit | Constant current limiting, recovers automatically after fault condition is removed | | | | | | |
| | Over Voltage | 23 – 27V | 28 – 34V | 34 – 38V | 41 – 46V | 47 – 53V | 54 – 63V | 59 – 65V |
| | Over Temperature | Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery | | | | | | |
| | Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | |
| Environment | Working Temp. | -40 – +70°C (Refer to "Derating Curve") | | | | | | |
| | 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 & EMC | Safety Standards 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 (LxWxH) | 220 x 68 x 38.8mm | | | | | | |
| | Packing | 1.12Kg; 12pcs / 14.4Kg / 0.74cu.ft | | | | | | |

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 & 47μf parallel capacitor.

³ Tolerance : includes set up tolerance, line regulation and load regulation.

⁴ Please refer to "DRIVING METHODS OF LED MODULE" in Meanwell's specification sheet

⁵ Derating may be needed under low input voltages. Please check the static characteristics in Meanwell's specification sheet for more details.

⁶ A type only.

⁷ Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1, FCC part18.

⁸ 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.

⁹ 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.

¹⁰ 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.

■ ORDERING EXAMPLE

PWR-HLG100W-24

IP67 rated. Cable for I/O connection

PWR-HLG100W-24-A

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

PWR-HLG100W-24-B

B: IP67 rated. Constant current level adjustable through output cable with 1–10VDC or 10V PWM signal or resistance.