



■ 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
- 5 years warranty (Note.9)

















Blank: IP67 rated. Cable for I/O connection.

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

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

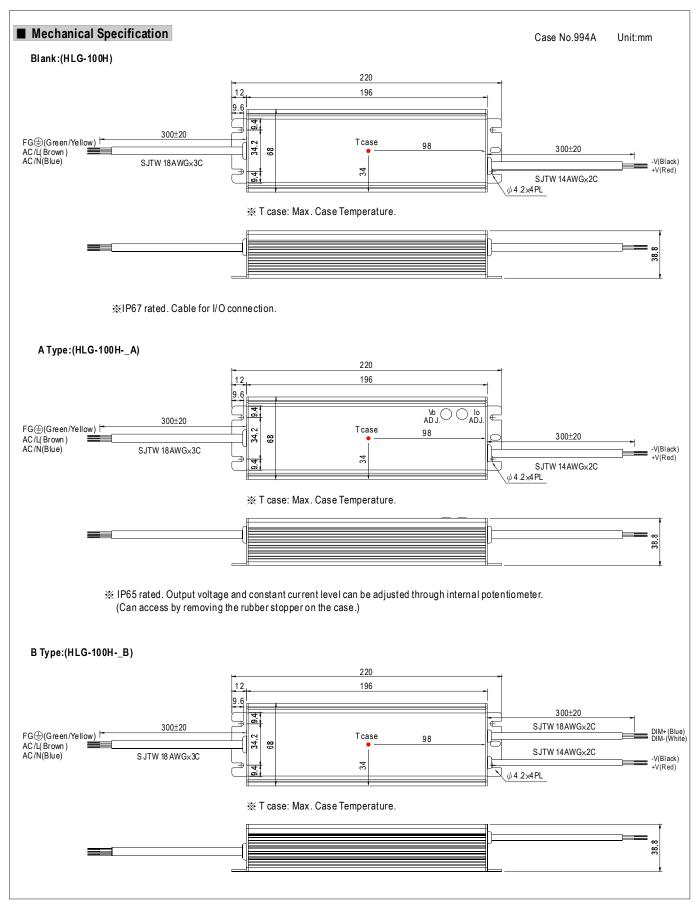
D (option, safety pending): IP67 rated. Timer dimming function, contact MEAN WELL for details.

SPECIFICATION

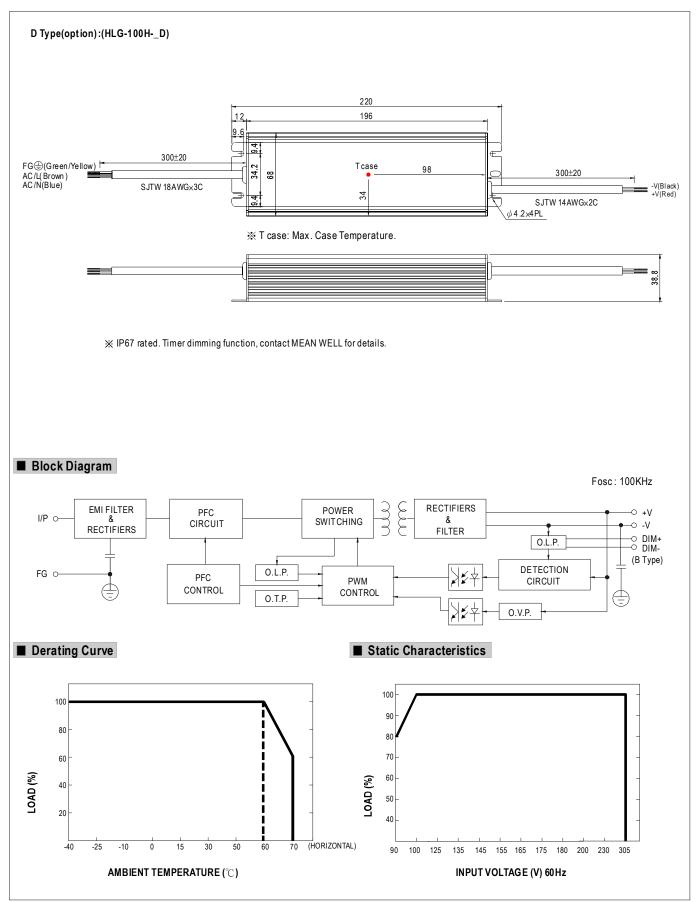
9. Refer to warranty statement.

MODEL		HLG-100H-20	HLG-100H-24	HLG-100H-30	HLG-100H-36	HLG-100H-42	HLG-100H-48	HLG-100H-54					
	DC VOLTAGE	20V	24V	30V	36V	42V	48V	54 V					
	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.) Note.2	150 mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p					
	VOLTAGE ADJ. RANGE Note.5	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40 V	38~46V	43 ~ 53V	49 ~ 58V					
OUTDUT	CURRENT AR L DANCE	Can be adjusted by internal potentiometer A type only											
OUTPUT	CURRENT ADJ. RANGE	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 Note.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 Note.7	2500ms, 50ms at	full load 230 VAC	7 / 115VAC ; B typ	e 2500 ms, 200 ms	at 95% load 230\	VAC / 115VAC						
	HOLD UP TIME (Typ.)	16ms at full load 230VAC /115VAC											
	VOLTAGE RANGE Note.4	90 ~ 305VAC 127 ~ 431VDC											
	FREQUENCYRANGE	47 ~ 63Hz											
	POWER FACTOR (Typ.)	PF>0.98/115VAC, PF>0.95/230VAC, PF>0.93/277VAC at full load (Please refer to "Power Factor Characteristic" curve)											
		THD< 20% when output loading \ge 60% at 115VAC/230VAC input and output loading \ge 75% at 277VAC input											
NPUT	EFFICIENCY (Typ.)	93%	93%	93%	93%	93%	93%	93%					
	AC CURRENT (Typ.)	1.2A / 115 VAC	110 100 100 100										
	INRUSH CURRENT (Typ.)	COLD START 60A(twidth=415µs measured at 50% Ipeak) at 230VAC											
	LEAKAGE CURRENT	<0.75mA / 277VA		,									
PROTECTION		95 ~ 106%											
	OVER CURRENT	Protection type: Constant current limiting, recovers automatically after fault condition is removed											
	SHORT CIRCUIT	Protection type: Constant current limiting, recovers automatically after fault condition is removed Constant current limiting, recovers automatically after fault condition is removed											
	SHORT CIRCUIT	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53 V	54 ~ 63V	59 ~ 65V					
	OVER VOLTAGE			1			J4 00V	00 001					
	OVER TEMPERATURE	Protection type: Shut down o/p voltage with auto-recovery or re-power on to recovery 100°C ±10°C (RTH2)											
		Protection type: Shut down o/p voltage, recovers automatically after temperature goes down											
	WORKING TEMP												
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./1 cycle, period for 72min. each along X, Y, Z axes											
	SAFETY STANDARDS Note.6	uL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent IP65 or IP67, J61347-1, J61347											
		design refer to UL60950-1, TUV EN60950-1											
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC											
EMC	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											
	MTBF	192.2K hrs min. MIL-HDBK-217F (25℃)											
OTHERS	DIMENSION	220*68*38.8mm (L*W*H)											
	PACKING	1.12Kg; 12pcs/14.4Kg/0.8CUFT											
NOTE	Ripple & noise are measured 3. Tolerance: includes set up 4. Derating may be needed up 5. A type only. Safety and EMC design ref 7. Length of set up time is me 8. The power supply is considered.	ed at 20MHz of batolerance, line reg nder low input voltier to EN60598-1, assured at cold firstered as a compor- nal equipment man	1.12Kg; 12pcs/14.4Kg/0.8CUFT y mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. d at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. tolerance, line regulation and load regulation. der low input voltages. Please check the static characteristics for more details. er to EN60598-1, CNS15233, GB7000.1, FCC part18. assured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. ered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the all equipment manufacturers must re-qualify EMC Directive on the complete installation again.										



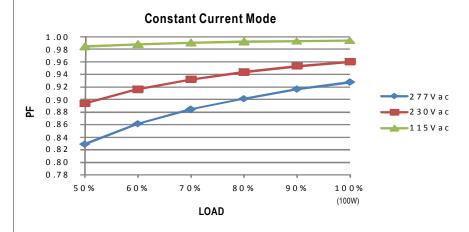






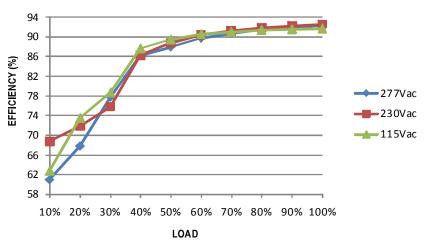


■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (48V Model)

HLG-100H series possess superior working efficiency that up to 93% can be reached in field applications.

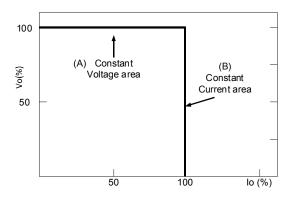


■ DRIVING METHODS OF LED MODULE

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.

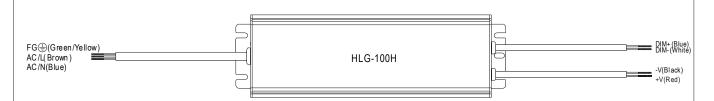
Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).



Typical LED power supply I-V curve



■ DIMMING OPERATION (for B-type only)



- ※ Please DO NOT connect "DIM-" to "-V".
- ※ Reference resistance value for output current adjustment (Typical)

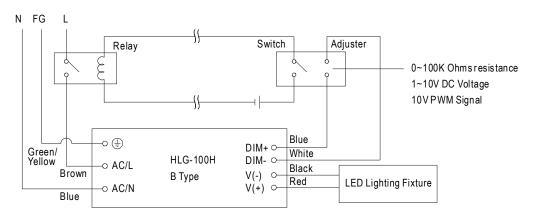
Resistance value	10K Ω	20K Ω	30K Ω	40K Ω	50K Ω	60K Ω	70K Ω	80K Ω	90ΚΩ	100K Ω	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%
Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10 V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%
× 10V PWM signal for output current adjustment (Typical): Frequency range :100 Hz ~ 3KHz											

Percentage of rated current 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 95%~108°	Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
	Percentage of rated cur	rent 10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

**Wusing the built-in dimming function on B-type model can't turn the lighting fixture totally dark. Please refer to the connection method below to achieve 0% brightness of the lighting fixture connecting to the LED power supply unit.

*Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.

Dimming connection diagram for turning the lighting fixture ON/OFF:



Using a switch and relay can turn ON/OFF the lighting fixture.

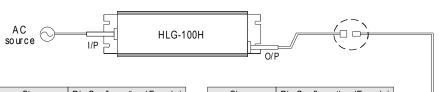
- 1. Output constant current level can be adjusted through output cable by connecting a resistance or 1~10Vdc or 10V PWM signal between DIM+ and DIM-.
- 2.The LED lighting fixture can be turned ON/OFF by the switch.



■ WATERPROOF CONNECTION

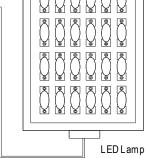
Waterproof connector

Waterproof connector can be assembled on the output cable of HLG-100H to operate in dry/wet/damp or outdoor environment.



Size	Pin Configura	ition (Female)		
M12	00	000		
IVI IZ	4-PIN	5-PIN		
	5A/P IN	5A/PIN		
Order No.	M12-04	M12-05		
Suitable Current	10A max.	10A max.		

Size	Pin Configuration (Female)					
M 15	00					
IVI IS	2-PIN					
	12A/P IN					
Order No.	M15-02					
Suitable Current	12A max.					



O Cable Joiner

