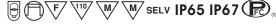




- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- · Protections: Short circuit / Over current / Over voltage / Over temperature
- · Cooling by free air convection
- · OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- "UL8750 listed" safety approved for HLG-80H
 BL
- · Class 2 power unit
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- · Suitable for dry / damp / wet locations
- 5 years warranty (Note.10)













HLG-80H-12A

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.

BL (option): Contact MEAN WELL for details.

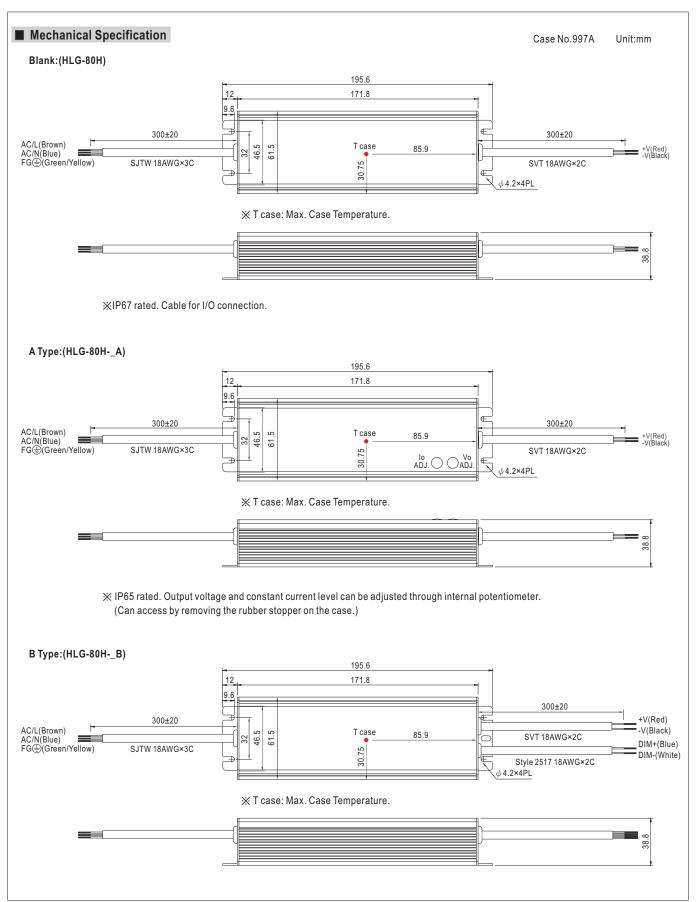
D (option): IP67 rated. Timer dimming function, contact MEAN WELL for details.

SPECIFICATION

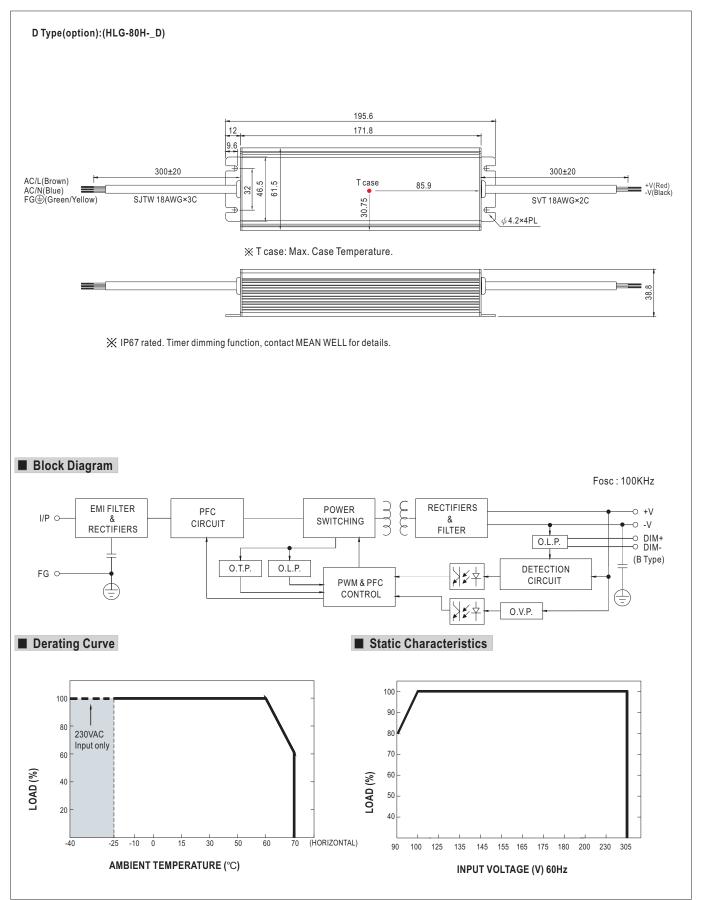
MODEL		HLG-80H-12	HLG-80H-15	HLG-80H-20	HLG-80H-24	HLG-80H-30	HLG-80H-36	HLG-80H-42	HLG-80H-48	HLG-80H-54			
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V			
	CONSTANT CURRENT REGION Note.4	7.2 ~12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V			
	RATED CURRENT	5A	5A	4A	3.4A	2.7A	2.3A	1.95A	1.7A	1.5A			
	RATED POWER	60W	75W	80W	81.6W	81W	82.8W	81.9W	81.6W	81W			
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p			
	VOLTAGE ADJ. RANGE Note.6			17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V			
OUTPUT		Can be adjusted by internal potentiometer A type only											
	CURRENT ADJ. RANGE	3 ~ 5A	3 ~ 5A	2.4 ~ 4A	2.04 ~ 3.4A	1.62 ~ 2.7A	1.38 ~ 2.3A	1.17 ~ 1.95A	1.02 ~ 1.7A	0.9 ~ 1.5A			
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.0%	±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%	±0.5%	±0.5%			
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%			
	SETUP, RISE TIME Note.8	1200ms 80ms			OVAC at full loa	ad · B type 1200	ms 200ms/11	5VAC 500ms	200ms/230VA	C at 95% load			
	HOLD UP TIME (Typ.)	1200ms,80ms/115VAC 500ms,80ms/230VAC at full load; B type 1200ms,200ms/115VAC 500ms,200ms/230VAC at 95% load 16ms at full load 230VAC /115VAC											
		90 ~ 305VAC	127 ~ 431										
	FREQUENCY RANGE	47 ~ 63Hz	121 401	1100									
	POWER FACTOR (Typ.)		AC DE>0.06/3	230\/AC DE>0	QΛ/277\/ΔC at	full load (Pleas	a refer to "Pou	er Factor Chai	actoristic" cur	<i>γ</i> ο)			
	TOTAL HARMONIC DISTORTION					,				,			
INPUT	EFFICIENCY (Typ.)	88%	89%	90%	90.5%	91%	91%	91%	91%	91%			
INFUI	AC CURRENT (Typ.)	0.85A / 115VA			0.4A / 277VA		9170	9170	9170	9170			
	INRUSH CURRENT (Typ.)	0.85A / 115VAC											
	LEAKAGE CURRENT	1 /											
	LEARAGE CURRENT	<0.75mA/277VAC											
	OVER CURRENT Note.4												
		Protection type: Constant current limiting, recovers automatically after fault condition is removed											
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed											
PROTECTION	OVER VOLTAGE	14 ~ 17V	18 ~ 24V	23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 63V	59 ~ 68V			
		Protection type: Shut down o/p voltage, re-power on to recover											
	OVER TEMPERATURE		Shut down o/p voltage, re-power on to recover										
	WORKING TEMP.	,	-40 ~ +70°C (Refer to "Derating Curve")										
	WORKING HUMIDITY	20 ~ 95% RH	non-condensir	ng									
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C,	10 ~ 95% RH										
	TEMP. COEFFICIENT	±0.03%/°C (0	~ 60°C)										
	VIBRATION	10 ~ 500Hz, 5	G 12min./1cyc	ele, period for	72min. each al	ong X, Y, Z axes	3						
	SAFETY STANDARDS Note.7	UL8750, CSA C22.2 No. 250.0-08(except for HLG-80H-48/54V & HLG-80H-48/54BL), UL8750 listed for HLG-80H-											
	SAFETT STANDARDS Note.	EN61347-1, EN61347-2-13 independent, J61347-1, J61347-2-13, IP65 or IP67 approved; Design refer to UL60950-1, TUV EN60950-1											
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75	(VAC I/P-F	G:2KVAC O	/P-FG:1.5KVA	.C							
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-F	G, O/P-FG:10	00M Ohms / 50	0VDC / 25°C/	70% RH							
	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											
	MTBF	357.8Khrs min. MIL-HDBK-217F (25°C)											
OTHERS	DIMENSION	195.6*61.5*38	3.8mm (L*W*H)									
	PACKING	0.84Kg; 16pcs	/14.4Kg/0.54C	CUFT									
NOTE	 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25[°]C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. Please refer to "DRIVING METHODS OF LED MODULE". Derating may be needed under low input voltages. Please check the static characteristics for more details. 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. Refer to warranty statement.
- 11. 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.



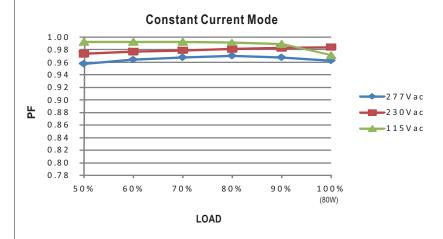






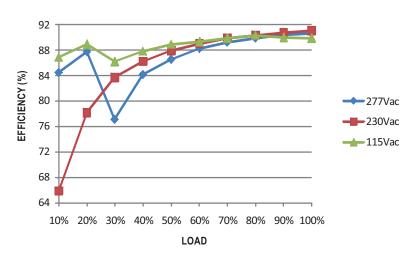


■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (48V Model)

HLG-80H series possess superior working efficiency that up to 91% can be reached in field applications.

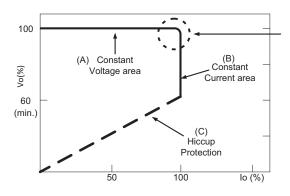


■ DRIVING METHODS OF LED MODULE

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

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.



■ DIMMING OPERATION(for B-type only)



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

Resistance	Single driver	10ΚΩ	20ΚΩ	30ΚΩ	40ΚΩ	50ΚΩ	60ΚΩ	70ΚΩ	80ΚΩ	90ΚΩ	100ΚΩ	OPEN
value	Multiple drivers	10KΩ/N	20KΩ/N	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80KΩ/N	90KΩ/N	100KΩ/N	
Percentage	e of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

¾ 1 ~ 10V dimming function for output current adjustment (Typical)

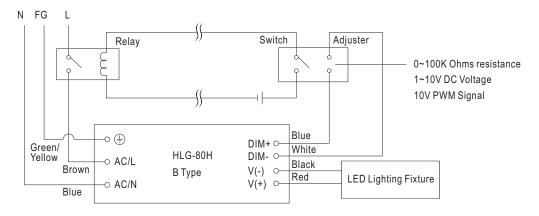
Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

* 10V PWM signal for output current adjustment (Typical): Frequency range:100Hz ~ 3KHz

Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	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 $\mbox{ON/OFF}$:



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

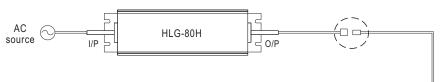
- 1.Output constant current level can be adjusted through output cable by connecting a resistance or 1~10Vdc or 10V PWM signal between DIM+ and DIM-.
- 2. The LED lighting fixture can be turned ON/OFF by the switch.



■ WATERPROOF CONNECTION

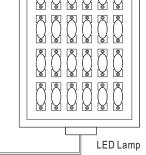
Waterproof connector

Waterproof connector can be assembled on the output cable of HLG-80H to operate in dry/wet/damp or outdoor environment.

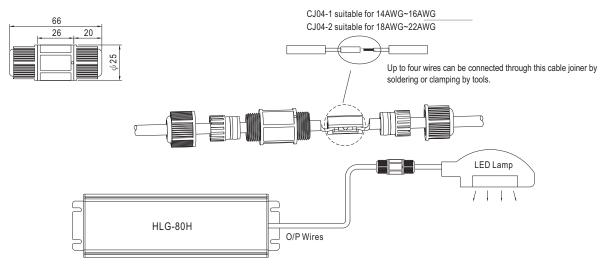


Size	Pin Configuration (Female						
M12	00	000					
IVI I Z	4-PIN	5-PIN					
	5A/PIN	5A/PIN					
Order No.	M12-04	M12-05					
Suitable Current	10A max.	10A max.					

Size	Pin Configuration (Female)
M15	00
IVITS	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.



O Cable Joiner



X CJ04 cable joiner can be purchased independently for user's own assembly. MEAN WELL order No. : CJ04-1, CJ04-2.



