



■ Features :

- Constant current design
- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- High efficiency up to 92%
- Protections: Short circuit / Over voltage / Over temperature
- Cooling by free air convection
- Output current adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Three in one dimming function (1~10Vdc or 10V 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.5)



HLG-80H-C350[A] A : IP65 rated. 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) : IP67 rated. Timer dimming function, contact MEAN WELL for details.

**SPECIFICATION**

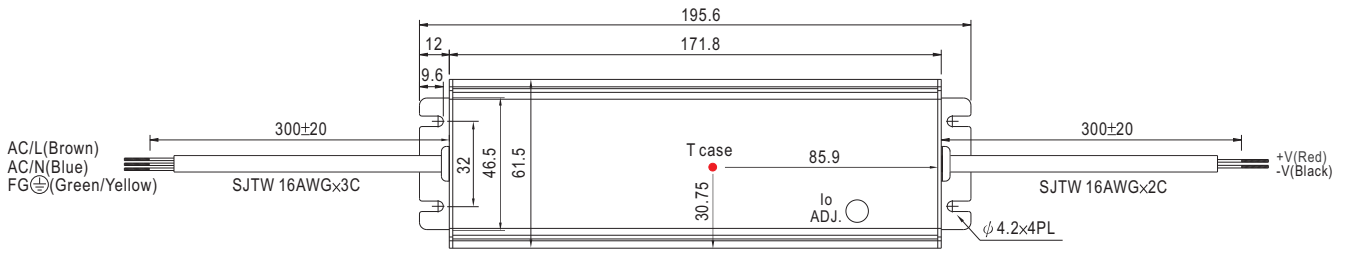
MODEL	HLG-80H-C350 <input type="checkbox"/>	HLG-80H-C700 <input type="checkbox"/>	
OUTPUT	<b>RATED CURRENT</b>	350mA	700mA
	<b>CURRENT ACCURACY</b>	±5.0%	
	<b>CONSTANT CURRENT REGION</b> Note.6	A type : 128V ~ 257V    B type : 167V ~ 257V	A type : 64V ~ 129V    B type : 84V ~ 129V
	<b>RATED POWER</b>	89.95W	90.3W
	<b>RIPPLE CURRENT</b>	±5%	
	<b>RIPPLE &amp; NOISE</b>	1V	0.5V
	<b>CURRENT ADJ. RANGE</b>	Can be adjusted by internal potentiometer or through output cable	
		210 ~ 350mA	420 ~ 700mA
<b>SETUP, RISE TIME</b>	2000ms, 80ms / 115VAC at full load    1000ms, 80ms / 230VAC at full load		
<b>HOLD UP TIME (Typ.)</b>	16ms at full load    230VAC / 115VAC		
INPUT	<b>VOLTAGE RANGE</b> Note.2	90 ~ 305VAC    127VDC ~ 431VDC	
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz	
	<b>POWER FACTOR (Typ.)</b>	PF>0.98/115VAC, PF>0.96/230VAC, PF>0.94/277VAC at full load (Please refer to "Power Factor Characteristic" curve)	
	<b>EFFICIENCY (Typ.)</b>	92%	92%
	<b>AC CURRENT (Typ.)</b>	0.88A / 115VAC    0.44A / 230VAC    0.38A / 277VAC	
	<b>INRUSH CURRENT (Typ.)</b>	COLD START 70A / 230VAC	
	<b>LEAKAGE CURRENT</b>	<0.75mA / 277VAC	
PROTECTION	<b>SHORT CIRCUIT</b>	Hiccup mode, recovers automatically after fault condition is removed	
	<b>OVER VOLTAGE</b>	300 ~ 340V	150 ~ 170V
		Protection type : Shut down o/p voltage with auto-recovery or re-power on to recovery	
<b>OVER TEMPERATURE</b>	85°C ±10°C (RTH2)		
	Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	<b>WORKING TEMP.</b>	-40 ~ +70°C (Refer to "Derating Curve")	
	<b>WORKING HUMIDITY</b>	10 ~ 95% RH non-condensing	
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +80°C, 10 ~ 95% RH	
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)	
	<b>VIBRATION</b>	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes	
SAFETY & EMC	<b>SAFETY STANDARDS</b> Note.3	UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent, IP65 or IP67 approved	
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3.75KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC	
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH	
	<b>EMC EMISSION</b>	Compliance to EN55015, EN61000-3-2 Class C (≥50% load) ; EN61000-3-3	
<b>EMC IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, heavy industry level (surge L,N-FG: 4KV), criteria A		
OTHERS	<b>MTBF</b>	309.7K hrs min.    MIL-HDBK-217F (25°C)	
	<b>DIMENSION</b>	195.6*61.5*38.8 mm (L*W*H)	
	<b>PACKING</b>	0.84Kg; 16pcs/14.4Kg/0.54CUFT	
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Derating may be needed under low input voltages. Please check the static characteristics for more details.</li> <li>3. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1.</li> <li>4. 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>5. Refer to warranty statement.</li> <li>6. Constant current operation region is within 50% ~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.</li> </ol>		

## Mechanical Specification

Case No.997A

Unit:mm

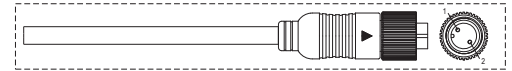
### A Type:(HLG-80H-C\_A)



※ T case: Max. Case Temperature.



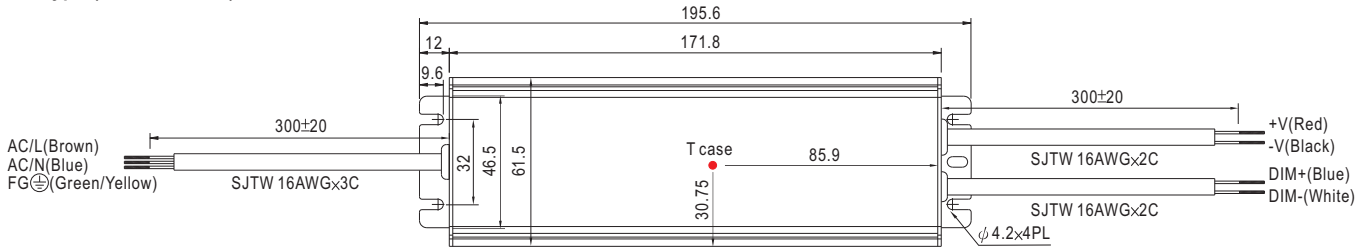
※Optional output water proof connector : T.B.D.



PIN1: +V PIN2: -V

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

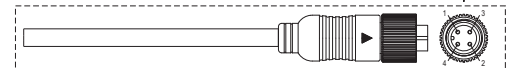
### B Type:(HLG-80H-C\_B)



※ T case: Max. Case Temperature.

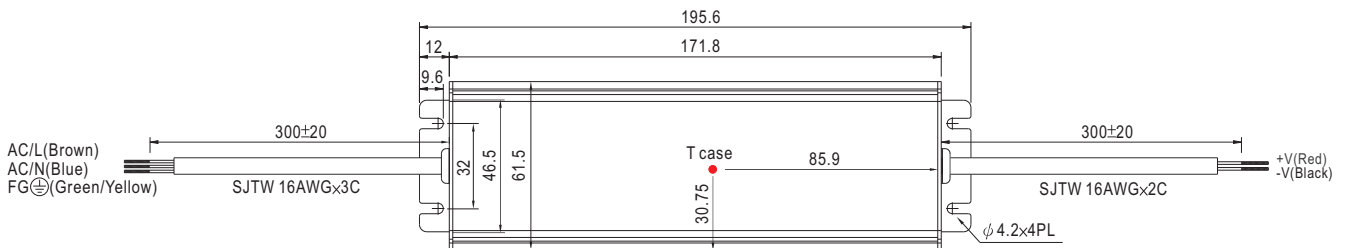


※Optional output water proof connector : T.B.D.



PIN1: +V PIN3: DIM+  
PIN2: -V PIN4: DIM-

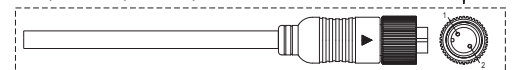
### D Type:(HLG-80H-C\_D)



※ T case: Max. Case Temperature.



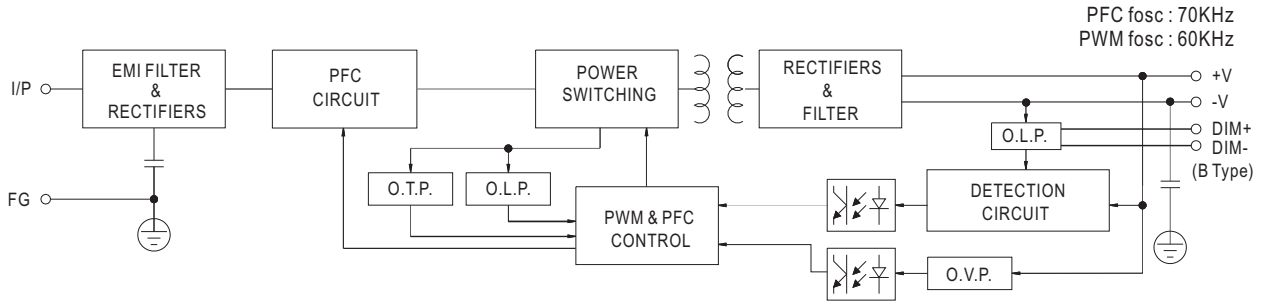
※Optional output water proof connector : T.B.D.



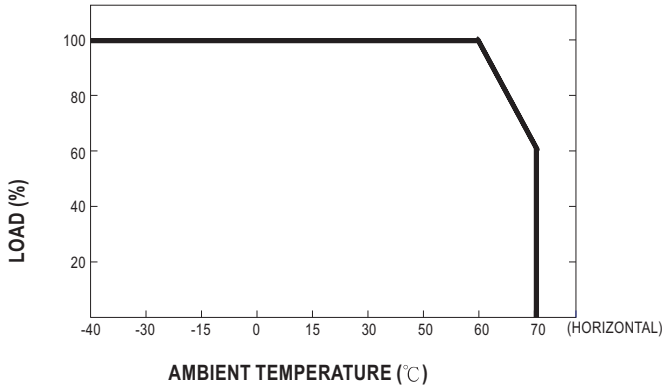
PIN1: +V PIN2: -V

※ IP67 rated. Timer dimming function, contact MEAN WELL for details.

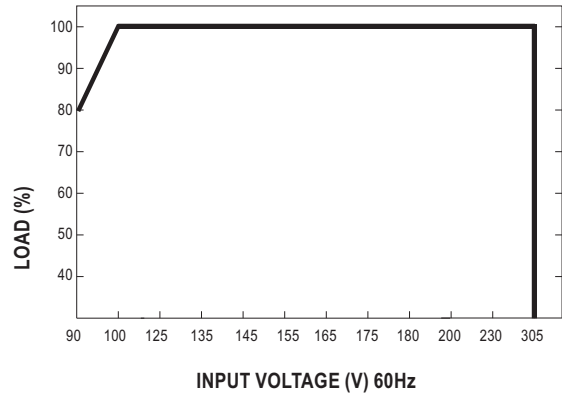
### Block Diagram



### Derating Curve

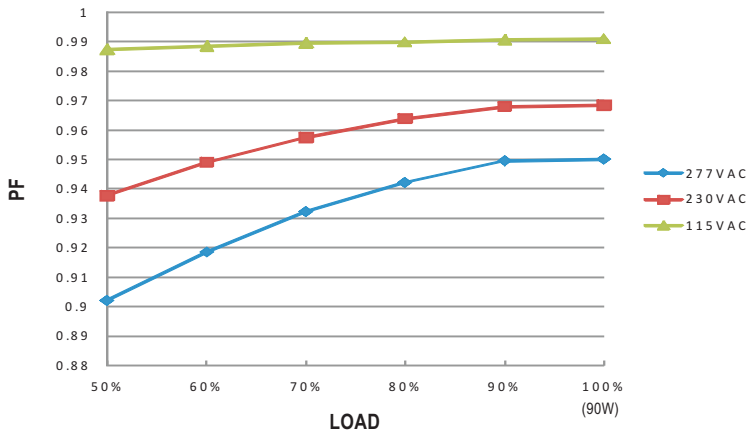


### Static Characteristics



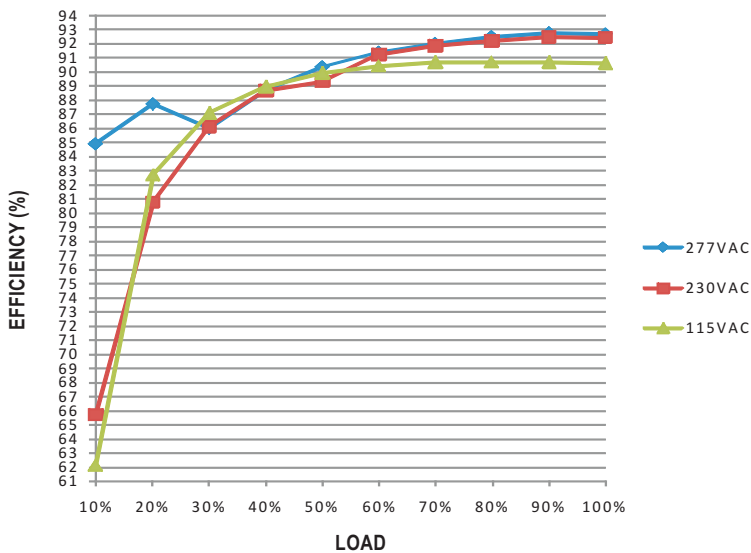
### Power Factor Characteristic

#### Constant Current Mode



### EFFICIENCY vs LOAD (HLG-80H-C700A Model)

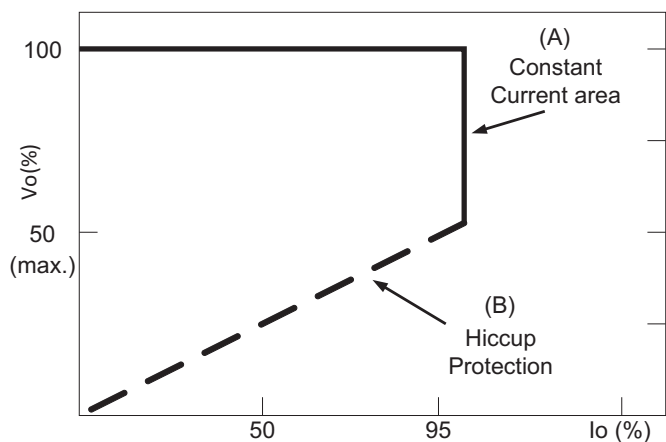
HLG-80H-C series possess superior working efficiency that up to 92% can be reached in field applications.



**DRIVING METHODS OF LED MODULE**

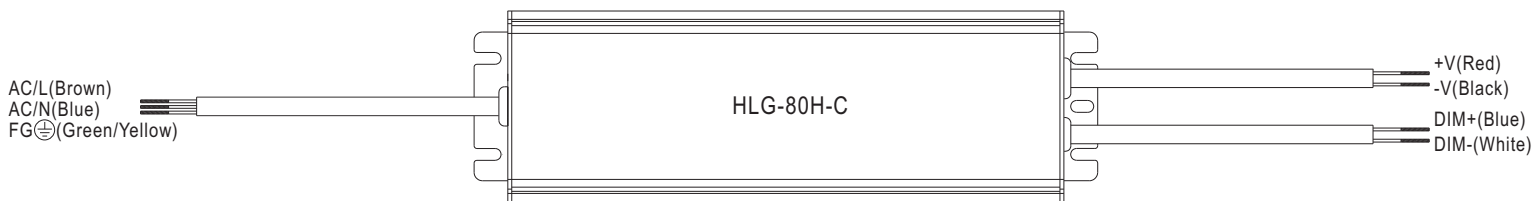
A typical LED power supply may work in "constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CC characteristic can be operated at CC mode (direct drive, at area (A)).



Typical LED power supply I-V curve

**DIMMING OPERATION**



※ Built-in 3 in 1 dimming function, IP67 rated. 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-.

※ Please DO NOT connect "DIM-" to "-V".

※ Reference resistance value for output current adjustment (Typical)

Resistance value	Single driver	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	OPEN
	Multiple drivers (N=driver quantity for synchronized dimming operation)	10KΩ/N	20KΩ/N	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80KΩ/N	90KΩ/N	100KΩ/N	-----
Percentage of rated current		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

※ 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%	102%~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%	102%~108%