



■ Features :

- MEAN WELL patented housing design (Patent No.: CN201220314551)
- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- High efficiency up to 93.5%
- Protections: Short circuit / Over current / Over voltage / Over temperature
- OCP point adjustable through internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Suitable for dry / damp / wet locations
- 5 years warranty, Tc70°C 40000hrs



HBG-160-60 [A] Blank : IP67 rated. Cable for I/O connection.  
 A : IP65 rated. Output constant current level can be adjusted through internal potentiometer.  
 B : IP67 rated. Output constant current lever can be adjusted through output cable with 1-10V,PWM signal and Resistance  
 E(option) : IP67 rated. Can be fixed by steel support.

**SPECIFICATION**

MODEL	HBG-160-24 <input type="checkbox"/>	HBG-160-36 <input type="checkbox"/>	HBG-160-48 <input type="checkbox"/>	HBG-160-60 <input type="checkbox"/>	
OUTPUT	DC VOLTAGE	24V	36V	48V	60V
	CONSTANT CURRENT REGION Note.4	14.4 ~ 24V	21.6 ~ 36V	28.8 ~ 48V	36 ~ 60V
	RATED CURRENT	6.5A	4.4A	3.3A	2.6A
	RATED POWER	156W	158.4W	158.4W	156W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	300mVp-p	300mVp-p	300mVp-p
	CURRENT ADJ. RANGE	Can be adjusted by internal potentiometer A type only			
		3.9 ~ 6.5A	2.6 ~ 4.4A	1.98 ~ 3.3A	1.6 ~ 2.6A
	VOLTAGE TOLERANCE Note.3	±2.0%			
	LINE REGULATION	±0.5%			
	LOAD REGULATION	±1.0%			
SETUP, RISE TIME Note.6	2500ms, 200ms / 115VAC at full load		500ms, 200ms / 230VAC at full load		
HOLD UP TIME (Typ.)	12ms at full load		115VAC/230VAC		
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%	92%	93%	93.5%
	AC CURRENT (Typ.)	1.7A / 115VAC	0.78A / 230VAC	0.7A / 277VAC	
	INRUSH CURRENT (Typ.)	COLD START 65A(twidth=425µs measured at 50% Ipeak) at 230VAC			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 7 units (circuit breaker of type C) at 230VAC			
	LEAKAGE CURRENT	<0.75mA / 277VAC			
	PROTECTION	OVER CURRENT Note.4	95 ~ 108%		
		Protection type : Constant current limiting, recovers automatically after fault condition is removed			
OVER VOLTAGE		28 ~ 34V	41 ~ 47V	54 ~ 62V	65 ~ 75V
	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				
ENVIRONMENT	WORKING TEMP.	-40 ~ +60°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	UL8750,CSA C22.2 No.250.13-12,EN61347-1,EN61347-2-13 approved, design refer to EN60950			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load) ; EN61000-3-3			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547,light industry level (surge 4KV), criteria A			
OTHERS	MTBF	252.3Khrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	Refer to mechanical specification			
	PACKING	1.53Kg; 8pcs/13.8Kg/1.61CUFT			

**NOTE**

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. Constant current operation region is within 60% ~100% rated output voltage, and the output power must be more than 60% rated output power.  
This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
6. 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.
7. 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.
- 8.To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently