

# 100W Single Output Switching Power Supply HLG-100H(AB) series





#### ■ 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
- 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
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.9)

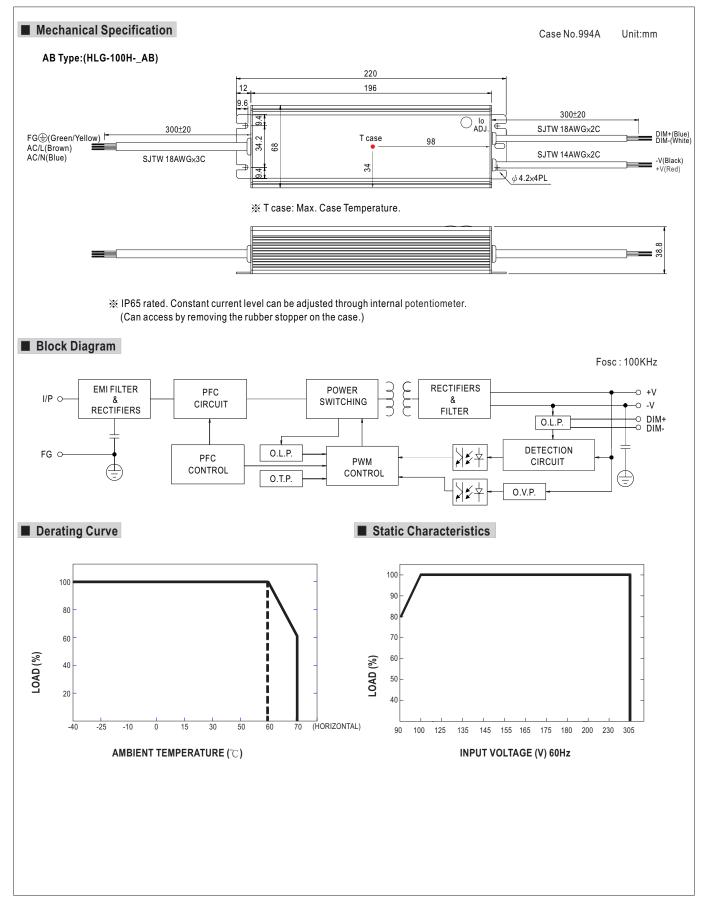


## **SPECIFICATION**

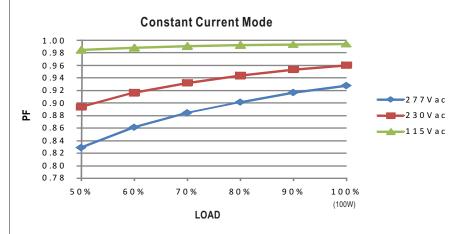
	HLG-100H-20AB	HLG-100H-24AB	HLG-100H-30AB	HLG-100H-36AB	HLG-100H-42AB	HLG-100H-48AB	HLG-100H-54A					
DC VOLTAGE	20V	24V	30V	36V	42V	48V	54V					
RATED CURRENT	4.8A	4A	3.2A	2.65A	2.28A	2A	1.77A					
	96W	96W	96W	95.4W	95.76W	96W	95.58W					
		1.1	1 1	200mVp-p			200mVp-p					
` '					r r							
CURRENT ADJ. RANGE					1 4 ~ 2 28A	1 25 ~ 2A	1.1 ~ 1.77A					
VOLTAGE TOLERANCE Note 3							±1.0%					
							±0.5%					
							±0.5%					
				20.070	20.070	20.070	20.070					
, , , ,												
		121 ~ 431VDC										
		DE: 0.05/000\/A.O.	DE: 0.00/077\/A.O.	((	( , ID							
( ) . ,				,			, ,					
( ) ,					93%	93%	93%					
( ) . ,			0.5A / 277VA	C								
LEAKAGE CURRENT	<0.75mA / 277VA	C										
OVER CURRENT	95 ~ 106%											
	Protection type: Constant current limiting, recovers automatically after fault condition is removed											
SHORT CIRCUIT	Constant current I	imiting, recovers a	utomatically after fa	ault condition is rem	noved							
OVER VOLTAGE	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 60V	59 ~ 65V					
OVER VOLIAGE	Protection type: Shut down o/p voltage with auto-recovery or re-power on to recovery											
	100℃ ±10℃ (RTH2)											
OVER TEMPERATURE	Protection type:	Shut down o/p volt	age, recovers aut	omatically after ter	nperature goes do	wn						
WORKING TEMP.	-40 ~ +70°C (Refe	er to "Derating Curv	re")									
	20 ~ 95% RH non-	-condensing										
	-40 ~ +80°C, 10 ~	95% RH										
	,											
TIDIOTION				21011g X, 1, 2 axcs								
SAFETY STANDARDS Note.6			• • • • • • • • • • • • • • • • • • • •									
WITHSTAND VOLTACE				/A.C								
				-								
					0 (> 000(   1)	ENIOTODO O O						
				155024, light indust	ry level (surge 4KV	), criteria A						
			(25℃)									
DIMENSION	,											
PACKING	1.12Kg; 12pcs/14	.4Kg/0.8CUFT										
Ripple & noise are measure     Tolerance : includes set up     Derating may be needed ur     Safety and EMC design ref-     Length of set up time is me     The power supply is conside complete installation, the fin	ed at 20MHz of ba tolerance, line reg nder low input volta er to EN60598-1, ( asured at cold first ered as a compon aal equipment man	ndwidth by using a ulation and load re ages. Please chect CNS15233, GB700 start. Turning ON ent that will be ope	a 12" twisted pair-vegulation.  k the static charactor, FCC part18.  /OFF the power signated in combinate	vire terminated with teristics for more d upply may lead to ion with final equip	n a 0.1uf & 47uf particles etails. increase of the sets ment. Since EMC	arallel capacitor.  up time. performance will be	be affected by the					
	RATED CURRENT RATED POWER RIPPLE & NOISE (max.) Note.2 CURRENT ADJ. RANGE VOLTAGE TOLERANCE Note.3 LINE REGULATION LOAD REGULATION SETUP, RISE TIME Note.7 HOLD UP TIME (Typ.) VOLTAGE RANGE Note.4 FREQUENCY RANGE POWER FACTOR (Typ.) EFFICIENCY (Typ.) AC CURRENT (Typ.) INRUSH CURRENT (Typ.) INRUSH CURRENT OVER CURRENT OVER CURRENT SHORT CIRCUIT OVER VOLTAGE  OVER TEMPERATURE WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS Note.6 WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY MTBF DIMENSION PACKING 1. All parameters NOT special 2. Ripple & noise are measure 3. Tolerance: includes set up 4. Derating may be needed ur 6. Safety and EMC design ref 7. Length of set up time is me 8. The power supply is consid complete installation, the fir	DC VOLTAGE  RATED CURRENT  RATED POWER  RIPPLE & NOISE (max.) Note.2  CURRENT ADJ. RANGE  CURRENT ADJ. RANGE  CURRENT ADJ. RANGE  CURRENT ADJ. RANGE  COAD be adjusted be 3 ~ 4.8A  VOLTAGE TOLERANCE Note.3 ±1.0%  LINE REGULATION ±0.5%  LOAD REGULATION ±0.5%  SETUP, RISE TIME Note.7 2500ms, 200ms at 40LD UP TIME (Typ.) 16ms at full load  VOLTAGE RANGE Note.4 90 ~ 305VAC  FREQUENCY RANGE 47 ~ 63Hz  POWER FACTOR (Typ.) 93%  AC CURRENT (Typ.) 1.2A / 115VAC  INRUSH CURRENT (Typ.) 1.2A / 115VAC  INRUSH CURRENT (Typ.) 1.2A / 115VAC  INRUSH CURRENT CODE START 75/  LEAKAGE CURRENT 00.75mA / 277VA  OVER CURRENT 100°C ±10°C (RT  Protection type: 100°C ±10°C (RT  Protection type: 20 ~ 95% RH non- STORAGE TEMP., HUMIDITY 100°C ±10°C (RT  TEMP. COEFFICIENT 100°C ±10°C (RT  VIBRATION 10 ~ 500Hz, 5G 1:  WITHSTAND VOLTAGE 1/P-O/P. 3.75KVA  ISOLATION RESISTANCE 1/P-O/P, 1/P-FG, 6  EMC EMISSION Compliance to EN  EMC IMMUNITY Compliance to EN  EMC IMMUNITY Compliance to EN  MTBF 192.2K hrs min.  DIMENSION 220°68*38.8mm (1.2R) 1.2Kg; 12pcs/14.  1. All parameters NOT specially mentioned are re- 2. Ripple & noise are measured at 20MHz of ba 3. Tolerance: includes set up tolerance, line reg 4. Derating may be needed under low input volta 6. Safety and EMC design refer to EN60598.1; 8. The power supply is considered as a compon  7. Length of set up time is measured at 20MHz of ba 3. Tolerance: includes set up tolerance, line reg 4. Derating may be needed under low input volta 6. Safety and power supply is considered as a compon	DC VOLTAGE	DC VOLTAGE	DC VOLTAGE	DC VOLTAGE	RATED CURRENT  4.8A  4.8A  4.9B  5.2A  5.28A  5.76W  5.76					



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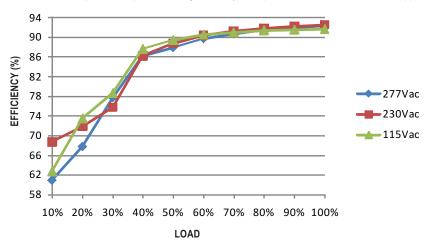


### ■ Power Factor Characteristic



# ■ EFFICIENCY vs LOAD (48V Model)

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

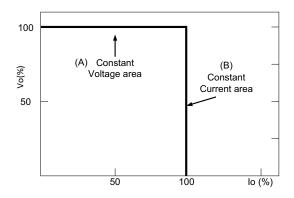


## ■ DRIVING METHODS OF LED MODULE

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).

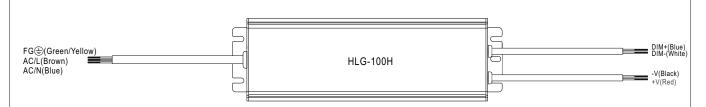


Typical LED power supply I-V curve



# 100W Single Output Switching Power Supply HLG-100H(AB) series

# **■ DIMMING OPERATION**



- Built-in 3 in 1 dimming function. 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".
- X Reference resistance value for output current adjustment (Typical)

Resistance value	<b>10K</b> Ω	<b>20K</b> Ω	<b>30K</b> Ω	<b>40K</b> Ω	<b>50K</b> Ω	<b>60K</b> Ω	<b>70K</b> Ω	<b>80K</b> Ω	90ΚΩ	<b>100K</b> Ω	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

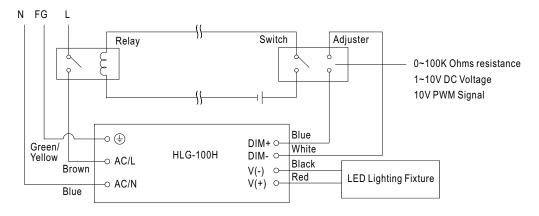
Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

× 10V PWM signal for output	current adjustment (Typical)	Frequency range :100Hz ~ 3KHz
X TOV F WWW Signal for output	current adjustinent (Typicar).	. Frequency range . 100HZ ~ SKHZ

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%

- XUsing the built-in dimming function 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.



Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

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#### Наши контакты:

**Телефон:** +7 812 627 14 35

Электронная почта: sales@st-electron.ru

Адрес: 198099, Санкт-Петербург,

Промышленная ул, дом № 19, литера Н,

помещение 100-Н Офис 331