



■ Features :

- Universal AC input / Full range
- Fully isolated plastic case with IP64 level
- Built-in constant current limiting circuit with adjustable OCP level
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in active PFC function
- IP64 design for indoor or outdoor installations
- UL1310 Class 2 power unit
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 2 years warranty



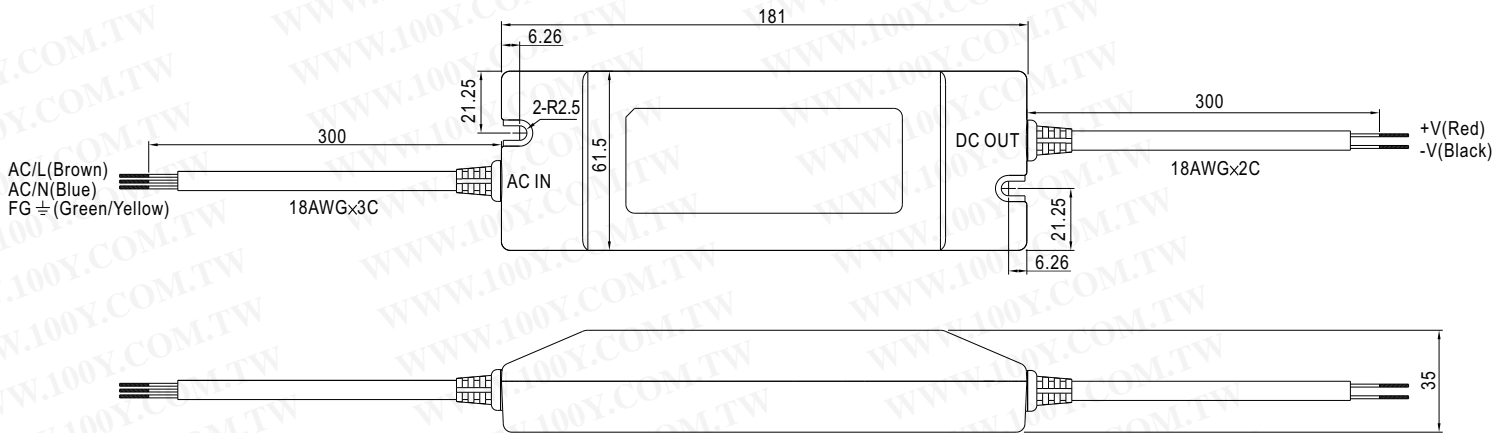
SPECIFICATION

MODEL	PLN-60-12	PLN-60-15	PLN-60-20	PLN-60-24	PLN-60-27	PLN-60-36	PLN-60-48		
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V	
	CONSTANT CURRENT REGION Note.7	8.4 ~ 12V	10.5 ~ 15V	14 ~ 20V	16.8 ~ 24V	18.9 ~ 27V	25.2 ~ 36V	33.6 ~ 48V	
	RATED CURRENT	5A	4A	3A	2.5A	2.3A	1.7A	1.3A	
	CURRENT RANGE	0 ~ 5A	0 ~ 4A	0 ~ 3A	0 ~ 2.5A	0 ~ 2.3A	0 ~ 1.7A	0 ~ 1.3A	
	RATED POWER	60W	60W	60W	60W	62.1W	61W	62.5W	
	RIPPLE & NOISE (max.) Note.2	2Vp-p	2.4Vp-p	1.8Vp-p	2.7Vp-p	2.7Vp-p	3.6Vp-p	4.6Vp-p	
	VOLTAGE ADJ. RANGE Note.6	11.5 ~ 13V	14.5 ~ 16.2V	19.5 ~ 22V	24 ~ 26V	25 ~ 30V	32.5 ~ 39V	43.6 ~ 51.8V	
	CURRENT ADJ. RANGE Note.6	Can be adjusted by internal potential meter SVR1							
	VOLTAGE TOLERANCE Note.3	3% ~ -25%. Can be adjusted by internal potential meter SVR2							
	LINE REGULATION	±10%							
LOAD REGULATION	±3.0%								
SETUP TIME	±5.0%								
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC		127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR	PF ≥ 0.9 at 75 ~ 100% load, 115VAC / 230VAC							
	EFFICIENCY(Typ.)	81.5%	84.5%	86%	86%	86.5%	87%	87%	
	AC CURRENT	0.8A/115VAC		0.4A/230VAC					
	INRUSH CURRENT(max.)	40A/230VAC							
	LEAKAGE CURRENT	<0.75mA / 240VAC							
PROTECTION	OVER CURRENT	95 ~ 110%		110% (max)					
	SHORT CIRCUIT Note.4	Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	13.8 ~ 16V		17.5 ~ 21V	22.8 ~ 25V	28 ~ 32V	31 ~ 35V	41 ~ 46V	54 ~ 60V
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover							
ENVIRONMENT	WORKING TEMP.	95°C ±10°C (TSW1) detect on heatsink of power transistor							
	WORKING HUMIDITY	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down							
	STORAGE TEMP., HUMIDITY	-30 ~ +50°C (Refer to output load derating curve)							
	TEMP. COEFFICIENT	20 ~ 95% RH non-condensing							
	VIBRATION	-40 ~ +80°C, 10 ~ 95% RH							
SAFETY & EMC	SAFETY STANDARDS	±0.03%/°C (0 ~ 50°C)							
	WITHSTAND VOLTAGE	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes							
	ISOLATION RESISTANCE	UL1310 Class 2, TUV EN61347-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91(except for 48V), IP64 approved							
	EMI CONDUCTION & RADIATION	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC							
	HARMONIC CURRENT	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMS IMMUNITY	Compliance to EN55015, EN55022 (CISPR22) Class B							
OTHERS	MTBF	Compliance to EN61000-3-2 Class C (≥ 75% load) ; EN61000-3-3							
	DIMENSION	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level, criteria A							
	PACKING	497.8Khrs min. MIL-HDBK-217F (25°C)							
NOTE	181*61.5*35mm (L*W*H)								
	0.5Kg; 24pcs/13Kg/0.75CUFT								
<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Direct connecting to LEDs is not suggested for models with "RIPPLE & NOISE" >±10% and using additional drivers is highly recommended.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Please refer to OLP characteristics.</p> <p>5. Derating may be needed under low input voltage. Please check the derating curve for more details.</p> <p>6. Output voltage can be adjusted through the SVR1 on the PCB ; limit of output constant current level can be adjusted through the SVR2 on the PCB.</p> <p>7. Constant current operation region is within 70% ~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.</p>									

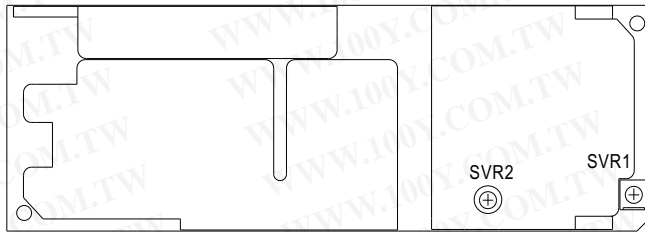
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Mechanical Specification

Case No.960A Unit:mm



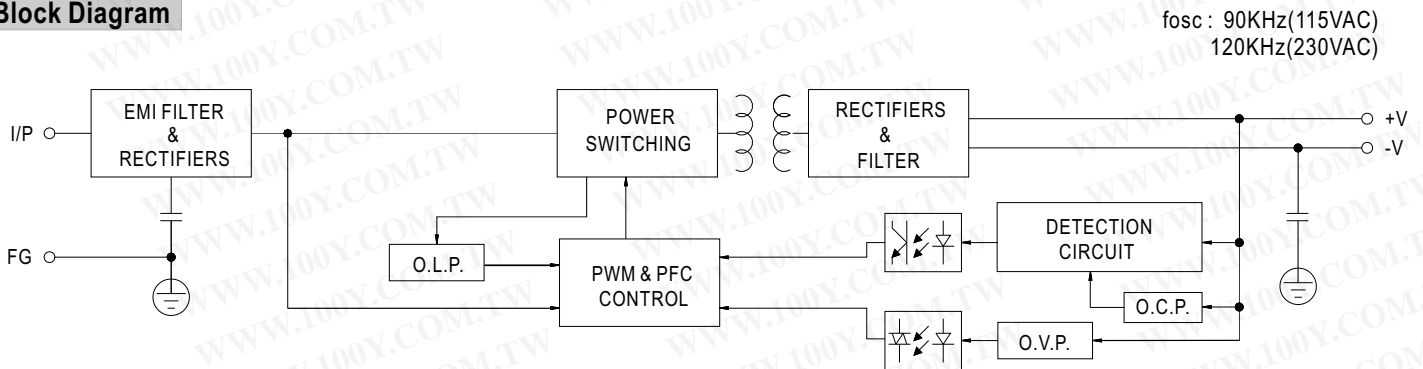
Output voltage and current adjustment : remove the upper case and adjust through SVR1 & SVR2 shown in the diagram.



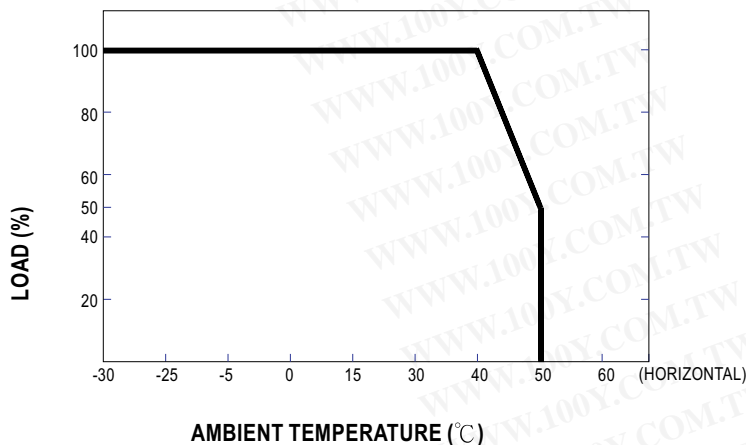
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

SVR1	Output voltage adjustment
SVR2	Output current adjustment

Block Diagram



Derating Curve



Static Characteristics

