



VOLTAGE

24V

CURRENT

2.5A

POWER

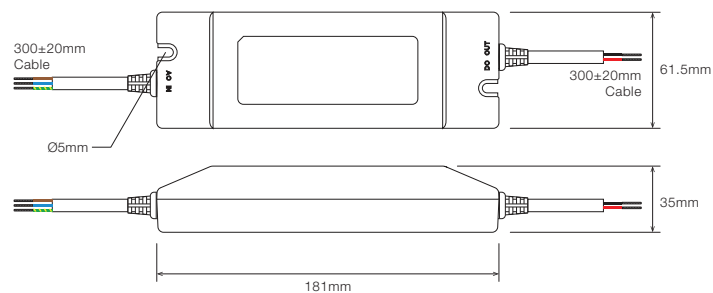
60W

Mean Well 60W Single Output LED Power Supply

FEATURES

- Universal AC input / Full range (up to 295VAC)
- High efficiency 89%
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit with adjustable OCP level
- Fully isolated plastic case with IP64 design for indoor or outdoor installations
- Built-in active PFC function
- Pass LPS
- Class II power unit
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- Suitable for dry / damp locations
- Compliance to worldwide safety regulations for lighting
- 2 years warranty

DIMENSIONS



■ TECHNICAL SPECIFICATIONS

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	48V	
	Constant Current Region ⁶	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	62.1W	62.4W
	Ripple & Noise (max.) ²	2Vp-p	2.4Vp-p	1.8Vp-p	2.7Vp-p	2.7Vp-p	3.6Vp-p	4.6Vp-p
	Voltage Adj. Range ⁵	11.5 – 13V	14.5 – 16.2V	19.5 – 22V	24 – 26V	25 – 30V	32.5 – 39V	43.6 – 51.8V
		Can be adjusted by internal potentiometer SVR1						
	Current Adj. Range ⁵	3% – -25%. Can be adjusted by internal potentiometer SVR2						
	Voltage Tolerance ³	±10%						
Line Regulation	±3.0%							
Load Regulation	±5.0%							
Setup Time	500ms / 230VAC		3000ms / 115VAC at full load					
Input	Voltage Range ⁴	90 – 295VAC		127 – 417VDC				
	Frequency Range	47 – 63Hz						
	Power Factor (typ.)	PF>0.92/115VAC, PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)						
	Efficiency (Typ.)	85%	86%	87.5%	87%	88%	89%	89%
	AC Current (Typ.)	0.8A/115VAC	0.4A/230VAC	0.3A/277VAC				
	Inrush Current (Typ.)	COLD START 35A (twidth=45µs measured at 50% Ipeak) at 230VAC						
	Leakage Current	<0.75mA / 240VAC						
Protection	Over Current ⁴	95 – 110%						
		Protection type : Constant current limiting, recovers automatically after fault condition is removed						
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed						
	Over Voltage	13.8 – 16V	17.5 – 21V	23 – 28V	28 – 32V	31 – 35V	41 – 46V	54 – 60V
	Protection type : Shut down o/p voltage, re-power on to recover							
Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down							
Environment	Working Temp.	-30 – +50°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, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes							
Safety & EMC	Safety Standards	UL879, UL1310, UL8750, CSA C22.2 No. 207-M89(except for 48V), TUV EN61347-1, EN61347-2-13 independent, CAN/CSA C22.2 No. 223-M91(except for 48V), CSA C22.2 No. 250.0-08(except for 48V), IP64, J61347-1, J61347-2-13 approved ; design refer to UL60950-1						
	Withstand Voltage	I/P-O/P:3.75KVAC		I/P-FG:2KVAC		O/P-FG:0.5KVAC		
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
	EMC Emission	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (>75% load) ; EN61000-3-3						
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,EN61547, light industry level, criteria A							
Others	MTBF	497.8Khrs min.		MIL-HDBK-217F (25°C)				
	Dimension (LxWxH)	181 x 61.5 x 35mm						
	Packing	0.5Kg; 24pcs / 13Kg / 0.75cu.ft						

- 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 Derating may be needed under low input voltages. Please check the static characteristics in Meanwell's specification sheet for more details.
- ⁵ 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.
- ⁶ Please refer to "DRIVING METHODS OF LED MODULE" in Meanwell's specification sheet.
- 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 Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
- ⁹ 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.

■ ORDERING EXAMPLE

PWR-PLN60-24

IP64 rated