



VOLTAGE

24V

CURRENT

1.25A

POWER

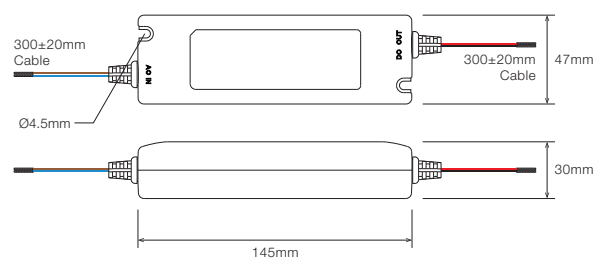
30W

Mean Well 30W Single Output LED Power Supply

FEATURES

- Universal AC input / Full range (up to 295VAC)
- 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, no FG
- 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

DIMENSIONS



■ TECHNICAL SPECIFICATIONS

Model	PLN-30-9	PLN-30-12	PLN-30-15	PLN-30-20	PLN-30-24	PLN-30-27	PLN-30-36	PLN-30-48		
Output	DC Voltage	9V	12V	15V	20V	24V	27V	36V	48V	
	Constant Current Region ⁶	6.3 – 9V	8.4 – 12V	10.5 – 15V	14 – 20V	16.8 – 24V	18.9 – 27V	25.2 – 36V	33.6 – 48V	
	Rated Current	3.3A	2.5A	2A	1.5A	1.25A	1.12A	0.84A	0.63A	
	Current Range	0 – 3.3A	0 – 2.5A	0 – 2A	0 – 1.5A	0 – 1.25A	0 – 1.12A	0 – 0.84A	0 – 0.63A	
	Rated Power	29.7W	30W	30W	30W	30W	30.24W	30.24W	30.24W	
	Ripple & Noise (max.) ²	2.6Vp-p	2Vp-p	2.6Vp-p	2.6Vp-p	2.6Vp-p	2.3Vp-p	4.5Vp-p	3.7Vp-p	
	Voltage Adj. Range ⁵	-5% – 10%. 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>0.95/115VAC, PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)								
	Total Harmonic Distortion	THD< 20% when output loading ≥ 75% at 115VAC/230VAC input and output loading ≥ 80% at 277VAC input								
	Efficiency (Typ.)	80%	82.5%	83.5%	84%	84%	84.5%	85%	85.5%	
	AC Current (Typ.)	0.4A/115VAC	0.2A/230VAC	0.15A/277VAC						
	Inrush Current (Typ.)	COLD START 35A (twidth=25µs measured at 50% Ipeak) at 230VAC								
	Max No. of PSUs on 16A Circuit Breaker	64 units (circuit breaker of type B) / 64 units (circuit breaker of type C) at 230VAC								
	Leakage Current	<0.5mA / 240VAC								
	Protection	Over Current ⁴	100 – 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		10 – 14V	14 – 17V	17 – 22V	23 – 26V	27 – 34V	31 – 35V	40 – 50V	53 – 63V	
Over Temperature		Shut down o/p voltage, re-power on to recover								
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	±0.06%/°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, CSA C22.2 No. 207-M89(except for 48V), TUV EN61347-1, EN61347-2-13, CAN/CSA C22.2 No.223-M91 (except for 48V),IP64, J61347-1,J61347-2-13 approved								
	Withstand Voltage	I/P-O/P:3.75KVAC								
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC Emission	Compliance to EN55015, EN61000-3-2 Class C (pin≥25W), Class D (>70% load) ; EN61000-3-3								
Others	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61547, light industry level, criteria B								
	MTBF	621.4Khrs min.			MIL-HDBK-217F (25°C)					
	Dimension (LxWxH)	145 x 47 x 30mm								
	Packing	0.22Kg; 60pcs / 14.2Kg / 1.25cu.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 0.1uf & 47uf 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-PLN30-24

IP64 rated