



VOLTAGE

24V

CURRENT

0.8A

POWER

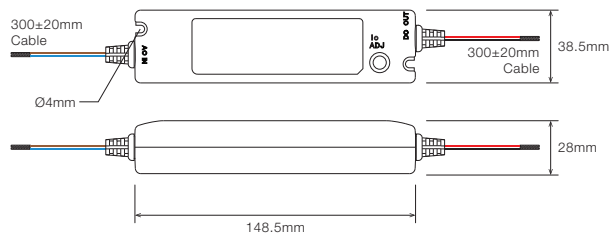
19.2W

Mean Well 20W Single Output LED Power Supply

FEATURES

- Universal AC input / Full range (up to 277VAC)
- 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
- Built-in active PFC function
- IP64 design for indoor or outdoor installations
- Small and compact size
- Class II power unit, no FG
- 100% full load burn-in test
- High reliability, low cost
- Suitable for dry / damp locations
- Suitable for LED lighting and moving sign applications
- 2 years warranty

DIMENSIONS



■ TECHNICAL SPECIFICATIONS

Model	PLN-20-12	PLN-20-18	PLN-20-24	PLN-20-36	PLN-20-48		
Output	DC Voltage	12V	18V	24V	36V	48V	
	Constant Current Region ⁶	9 – 12V	13.5 – 18V	18 – 24V	27 – 36V	36 – 48V	
	Rated Current	1.6A	1.1A	0.8A	0.55A	0.42A	
	Current Range	0 – 1.6A	0 – 1.1A	0 – 0.8A	0 – 0.55A	0 – 0.42A	
	Current Adj. Range ⁵	75% – 100%					
	Rated Power	19.2W	19.8W	19.2W	19.8W	20.2W	
	Ripple & Noise (max.) ²	2.5Vp-p	3.0Vp-p	3.0Vp-p	3.0Vp-p	3.8Vp-p	
	Voltage Tolerance ³	±10%					
	Line Regulation	±3.0%					
	Load Regulation	±10%					
	Setup Time	500ms / 230VAC	3000ms / 115VAC at full load				
	Input	Voltage Range ⁴	90 – 277VAC	127 – 392VDC			
		Frequency Range	47 – 63Hz				
		Power Factor	PF ≥ 0.9 at 75–100% load, 115VAC/230VAC; PF ≥ 0.9 at 85–100% load 277VAC (Please refer to "Power Factor Characteristic" curve)				
Total Harmonic Distortion		THD< 20% when output loading ≥ 75% at 115VAC/230VAC input and output loading ≥ 75% at 277VAC input					
Efficiency (Typ.)		80%	81%	82%	83%	83.5%	
AC Current (Typ.)		0.4A/115VAC	0.2A/230VAC	0.15A/277VAC			
Inrush Current (Typ.)		COLD START 35A (twidth=40µs measured at 50% Ipeak) at 230VAC					
Max No. of PSUs on 16A Circuit Breaker		98 units (circuit breaker of type B) / 98 units (circuit breaker of type C) at 230VAC					
Leakage Current		<0.5mA / 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	14 – 16V	19 – 22V	27 – 34V	41 – 46V	54 – 60V
		Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down				
		Environment	Working Temp.	-30 – +60°C (Refer to "Derating Curve")			
Working Humidity	20 – 90% RH non-condensing						
Storage Temp., Humidity	-40 – +80°C, 10 – 95% RH						
Temp. Coefficient	±0.06%/°C (0 – 50°C)						
Vibration	10 – 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
Safety & EMC	Safety Standards	IEC61347-1, IEC61347-2-13, TUV EN61347-1, EN61347-2-13, UL8750, CSA C22.2 No. 250.0-08, J61347-1, J61347-2-13, IP64 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(≥75% load); EN61000-3-3					
Others	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level, criteria A					
	MTBF	643.6Khrs min.	MIL-HDBK-217F (25°C)				
	Dimension (LxWxH)	148.5 x 38.5 x 28mm					
Packing	0.18Kg; 60pcs / 12.8Kg / 0.9cu.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 Please refer to "DRIVING METHODS OF LED MODULE" in Meanwell's specification sheet.

⁶ 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.

⁷ Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.

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 connected to the mains.

■ ORDERING EXAMPLE

PWR-PLN20-24

IP64 rated