18W Single Output Switching Power Supply — LPL-18 series



User's Manual

Features :

- 90-132VAC input only
- Fully encapsulated with IP67 level (Note.5)
- Protections:Short circuit/Overload/Over voltage/Over temperature
- Cooling by free air convection
- Class Ⅱ power unit, no FG
- Pass LPS
- 100% full load burn-in test
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- High reliability/Low cost
- 2 years warranty

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

LPS IP67 (LVD)

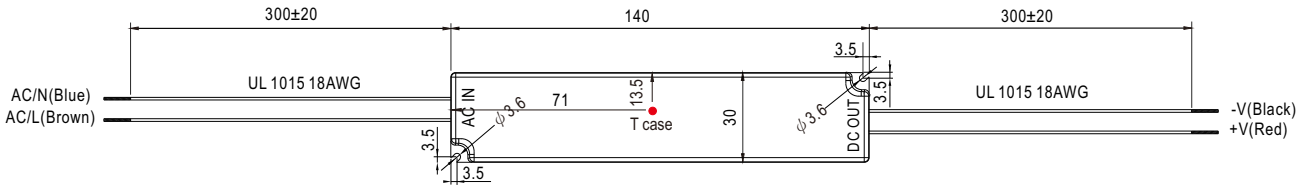
SPECIFICATION

MODEL		LPL-18-12	LPL-18-24	LPL-18-36
OUTPUT	DC VOLTAGE	12V	24V	36V
	RATED CURRENT	1.5A	0.75A	0.5A
	CURRENT RANGE	0 ~ 1.5A	0 ~ 0.75A	0 ~ 0.5A
	RATED POWER	18W	18W	18W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±3.0%		
	LINE REGULATION	±1.0%		
	LOAD REGULATION	±2.0%		
	SETUP, RISE TIME	1500ms, 30ms / 115VAC		
	HOLD UP TIME (Typ.)	20ms/115VAC at full load		
INPUT	VOLTAGE RANGE	90 ~ 132VAC 127 ~ 186VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY(Typ.)	80%	83%	84%
	AC CURRENT	0.5A/115VAC		
	INRUSH CURRENT(Typ.)	COLD START 40A(twidth=200μs measured at 50% Ipeak) at 115VAC		
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	16 units (circuit breaker of type B) / 27 units (circuit breaker of type C) at 115VAC		
	LEAKAGE CURRENT	0.25mA / 115VAC		
PROTECTION	OVERLOAD	Above 105% rated output power		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	13.8~ 16.2V	27.6~ 32.4V	41.4 ~ 48.6V
		Protection type : Shut off o/p voltage, clamping by zener diode		
	OVER TEMPERATURE	Shut down, recovers automatically after temperature goes down		
ENVIRONMENT	WORKING TEMP.	-30~ +70℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS	EAC TP TC 004,IP67 approved; design refer to UL1310 Class 2,TUV EN60950-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃/ 70% RH		
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, FCC Part 15, EN61000-3-2 Class A, EN61000-3-3, EAC TP TC 020		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, EAC TP TC 020		
OTHERS	MTBF	6901.7K hrs min. Telcordia SR-332 (Bellcore) ; 1171.8Khrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	140*30*22(L*W*H)		
	PACKING	0.175Kg; 70pcs/13.3Kgs/0.71CUFT		
NOTE	1. All parameters NOT specially mentioned are measured at 115VAC input, rated load and 25℃ 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. 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. 5. Suitable for indoor use or outdoor use without direct sunlight exposure. 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx			

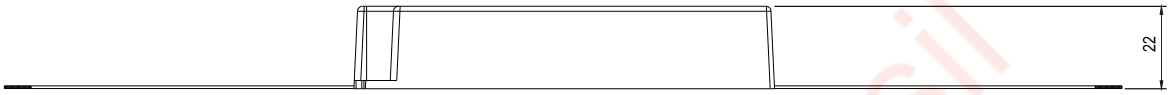
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■ Mechanical Specification

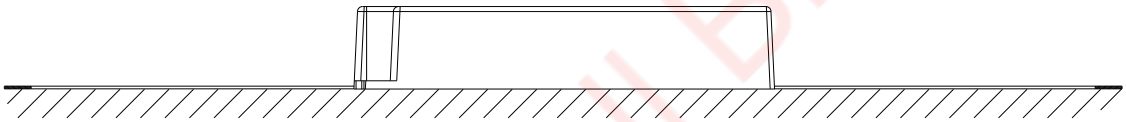
Unit:mm



※ T case: Max. Case Temperature

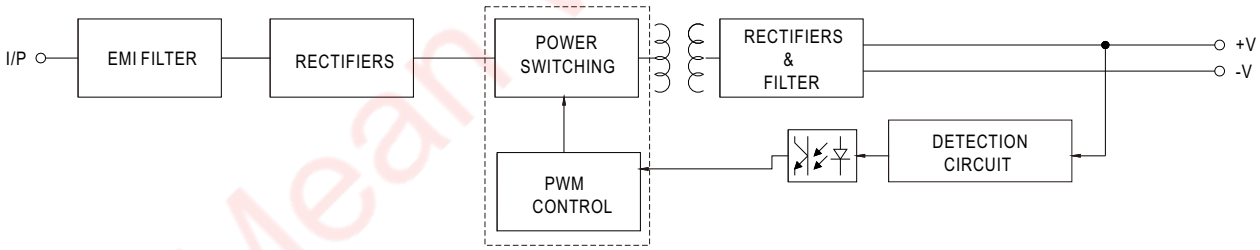


■ Recommend Mounting Direction

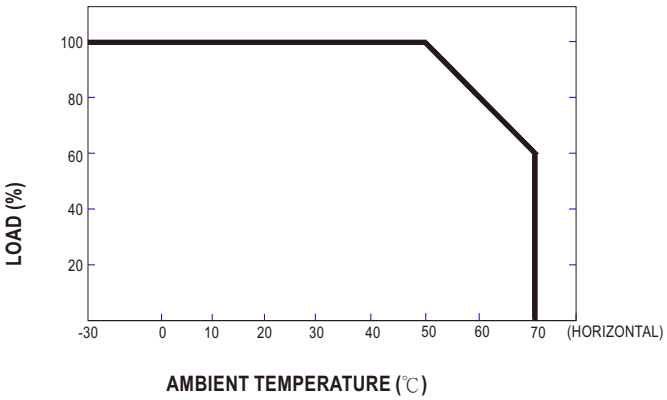


■ Block Diagram

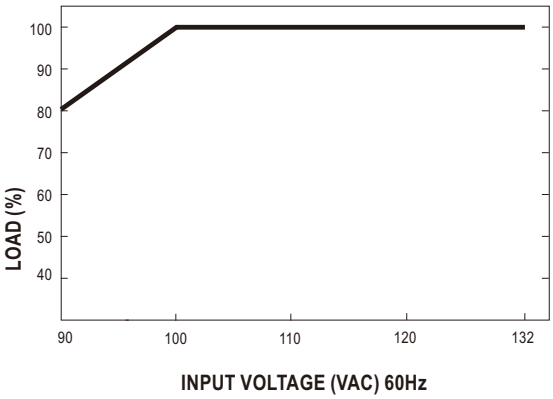
fosc : 60KHz



■ Derating Curve



■ Static Characteristics



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