20W Single Output Switching Power Supply — LPC-20 series

Features :

- Constant current design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over voltage
- Cooling by free air convection
- Small and compact size
- Fully encapsulated with IP67 level (Note.7)
- Fully isolated plastic case
- Class Ⅱ power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

LPS IP67 (for 350mA only) (except for 350mA)

SPECIFICATION

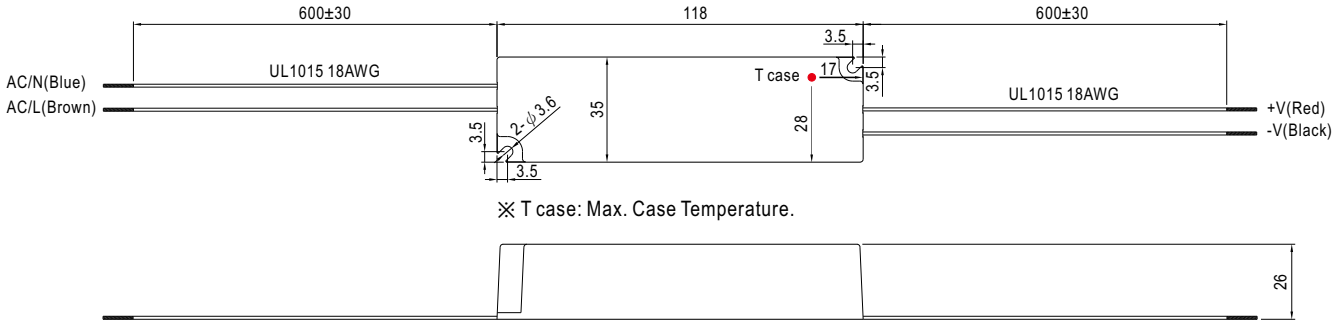
MODEL		LPC-20-350	LPC-20-700
OUTPUT	RATED CURRENT	350mA	700mA
	DC VOLTAGE RANGE	9 ~ 48V	9 ~ 30V
	RATED POWER	16.8W	21W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	
	CURRENT ACCURACY	±5.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±2.0%	
	SETUP, RISE TIME Note.6	500ms, 250ms / 230VAC 500ms, 250ms / 115VAC at full load	
	HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load	
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	83%	
	AC CURRENT (Typ.)	0.55A/115VAC 0.35A/230VAC	
	INRUSH CURRENT(Typ.)	COLD START 70A(twidth=220μs measured at 50% Ipeak) at 230VAC	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	8 units (circuit breaker of type B) / 14 units (circuit breaker of type C) at 230VAC	
	LEAKAGE CURRENT	0.25mA / 240VAC	
PROTECTION	OVER VOLTAGE	50.4 ~ 60V	31.5 ~ 40.5V
		Protection type : Shut off o/p voltage, clamping by zener diode	
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	UL879, UL1310 , CSA C22.2 No. 207-M89(except for LPC-20-350), CAN/CSA C22.2 No. 223-M91(except for LPC-20-350), TUV EN60950-1, EAC TP TC 004, IP67 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC	
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃/ 70% RH	
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, 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, criteria A, EAC TP TC 020	
OTHERS	MTBF	786.5Khrs min. MIL-HDBK-217F (25℃)	
	DIMENSION	118*35*26mm (L*W*H)	
	PACKING	0.22Kg; 60pcs/14.2Kg/0.72CUFT	

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC 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. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. 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.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.
8. 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).
9. For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf
10. This product is not intended for LED applications in the EU.(In the EU NPF/LPF/XLG series are recommended.)
11. To fulfill requirements of latest ErP regulation for lighting luminaires, this LED Driver can only be used behind a switch without permanently connected to mains.

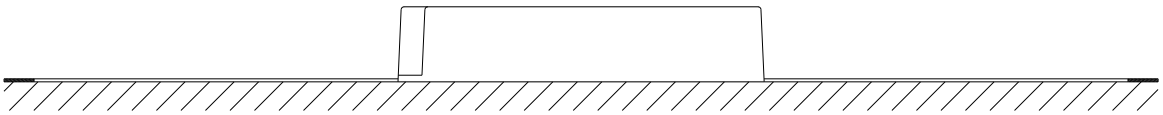
■ Mechanical Specification

Case No. 972A Unit:mm



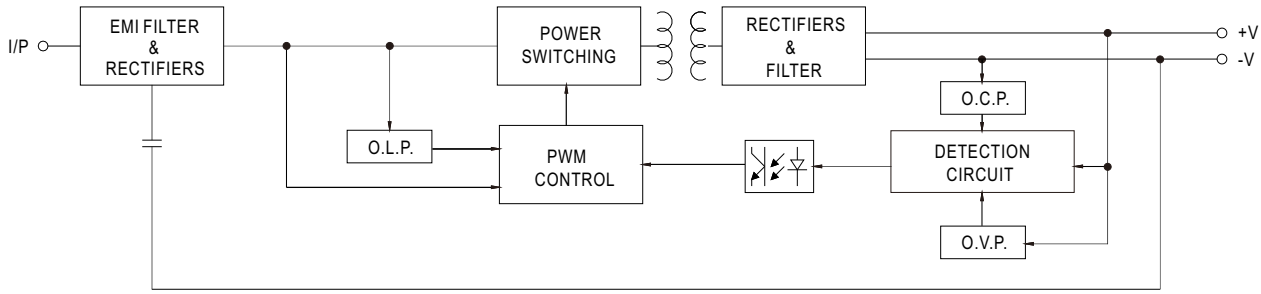
※ T case: Max. Case Temperature.

■ Recommend Mounting Direction

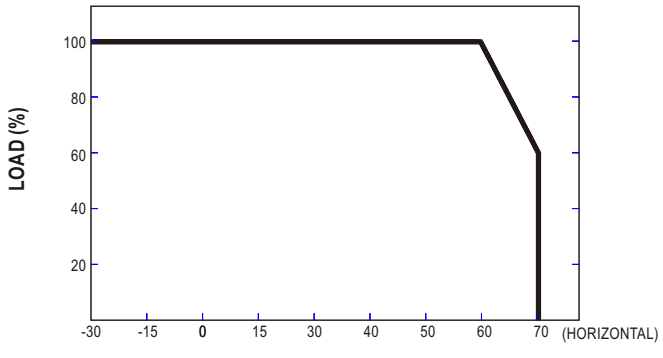


■ Block Diagram

fosc : 60KHz

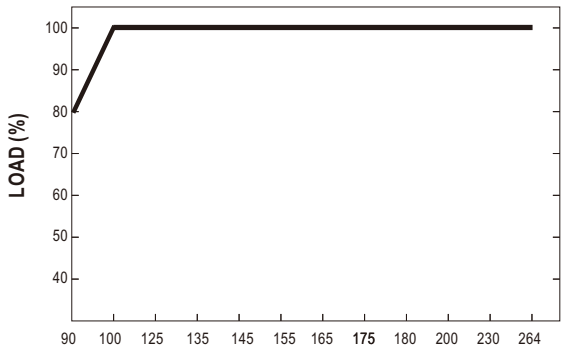


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Static Characteristics



INPUT VOLTAGE (V) 60Hz