



E-Star Power Development Co., Ltd. (E-STAR)
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20W LED Driver power supply < LPC-20



- 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 lighting and moving sign applications
 - 100% full load burn-in test
 - Low cost, high reliability
 - 2 years warranty



SPECIFICATION

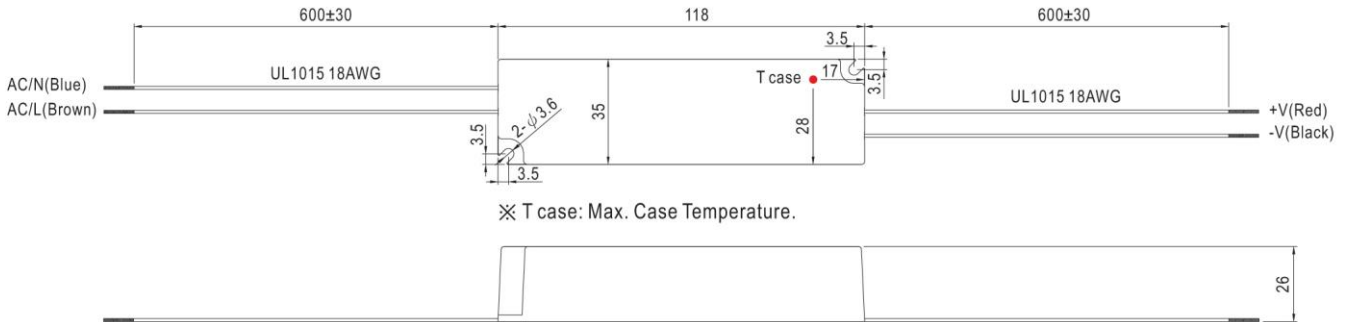
MODEL		LPC-20-350	LPC-20-700
OUTPUT	RATED CURRENT	350mA	700mA
	DC VOLTAGE RANGE	9 ~ 48V	9 ~ 30V
	RATED POWER	16.8W	21W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	
	CURRENT ACCURACY	±5.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±2.0%	
	SETUP, RISE TIME Note.6	500ms, 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°C (Refer to "Derating Curve")	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
	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, IP67 approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC	
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH	
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3	
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A	
OTHERS	MTBF	786.5Khrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	118*35*26mm (L*W*H)	
	PACKING	0.22Kg; 60pcs/14.2Kg/0.62CUFT	
NOTE	<ol style="list-style-type: none"> 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 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 unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit. 		



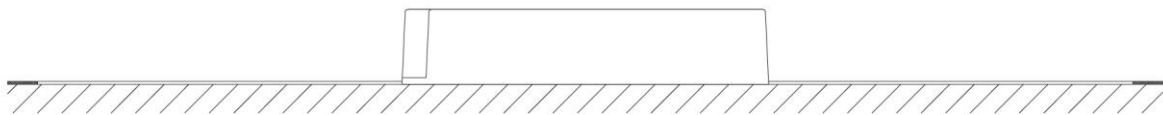
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Mechanical Specification

Case No. 972A Unit:mm

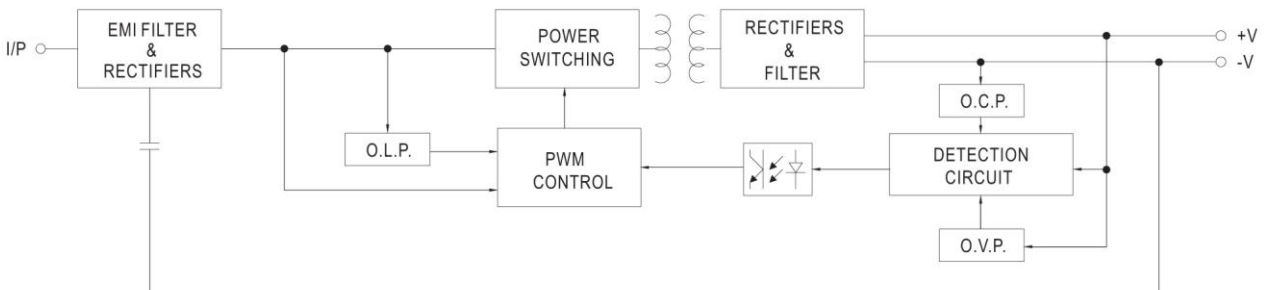


Recommend Mounting Direction

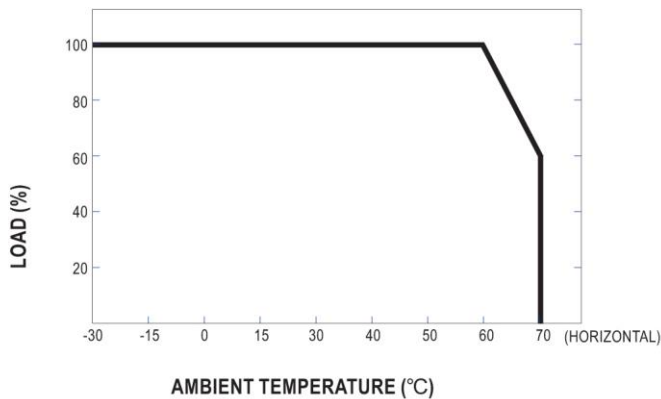


Block Diagram

fosc : 60KHz



Derating Curve



Static Characteristics

