



E-Star Power Development Co., Ltd. (E-STAR)  
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**18W LED Driver power supply < LPHC-18**



■ Features :

- Constant current mode power supply
- 180-264VAC input only
- Fully encapsulated with IP67 level (Note.6)
- Protections: Short circuit / 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 lighting and moving sign applications
- High reliability / Low cost
- 2 years warranty

☐ LPS IP67 CE

**SPECIFICATION**

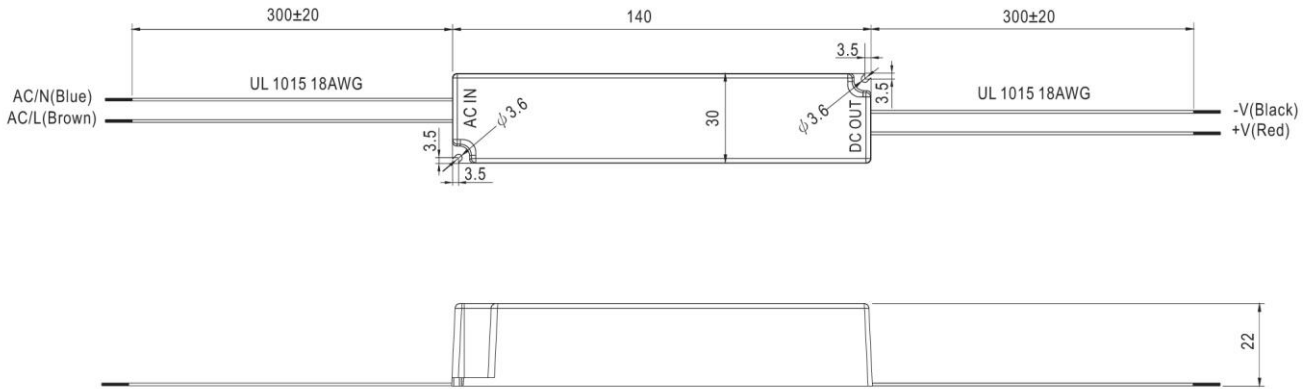
MODEL		LPHC-18-350	LPHC-18-700
OUTPUT	RATED CURRENT	350mA	700mA
	DC VOLTAGE RANGE	6~48V	6~25V
	RATED POWER	16.8W	17.5W
	RIPPLE & NOISE (max.) Note.2	300mVp-p	250mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%	
	CURRENT ACCURACY	±8.0%	
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±3.0%	
	SETUP, RISE TIME	3600ms, 100ms / 230VAC	
HOLD UP TIME (Typ.)	20ms/230VAC at full load		
INPUT	VOLTAGE RANGE	180 ~ 264VAC    254 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY(Typ.)	80%	80%
	AC CURRENT	0.3A/230VAC	
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=190µs measured at 50% Ipeak) at 230VAC	
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	13 units (circuit breaker of type B) / 22 units (circuit breaker of type C) at 230VAC	
PROTECTION	LEAKAGE CURRENT	0.25mA / 240VAC	
	OVER VOLTAGE	50.4~ 60V	28.75~ 33.75V
	OVER TEMPERATURE	Tj 170°C typically (U1) Detect on main control IC Protection type : Hiccup mode, recovers automatically after temperature goes down	
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	±0.2%/°C (0 ~ 50°C)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
SAFETY & EMC (Note 5)	SAFETY STANDARDS	IP67 approved; design refer to UL1310 Class 2, TUV EN60950-1, CAN/CSA C22.2 No. 223-M91	
	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 A, EN61000-3-2 Class A, EN61000-3-3	
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A	
	MTBF	1200.6K hrs min.    MIL-HDBK-217F (25°C)	
	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 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 characteristic 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. Suitable for indoor use or outdoor use without direct sunlight exposure. 7. 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**

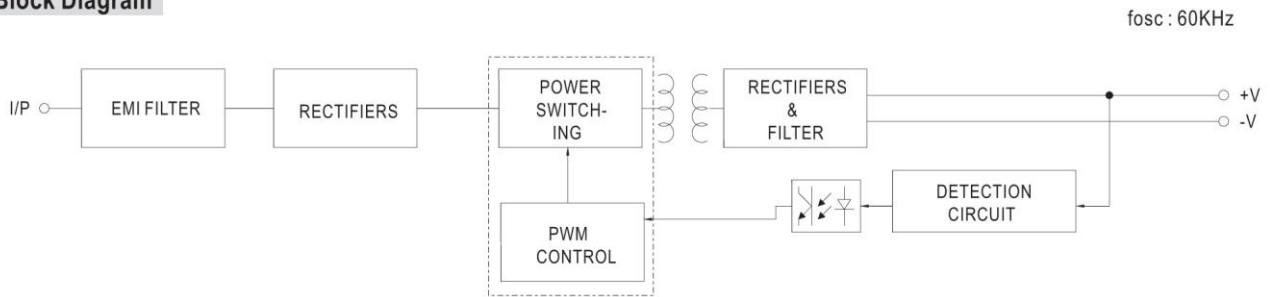
Unit:mm



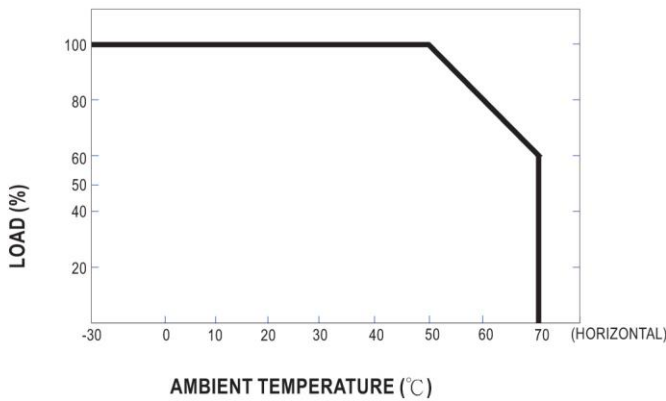
**Recommend Mounting Direction**



**Block Diagram**



**Derating Curve**



**Static Characteristics**

