



# 60W Single Output Switching Power Supply

# LPC-60 series



### ■ Features :

- Constant current design
- Universal AC input / Full range
- Epoxy encapsulated with IP67 level
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over current / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- UL1310 Class 2 power unit, pass LPS
- 100% full load burn-in test
- Low cost, high reliability
- Suitable for LED lighting and moving sign applications
- 2 years warranty

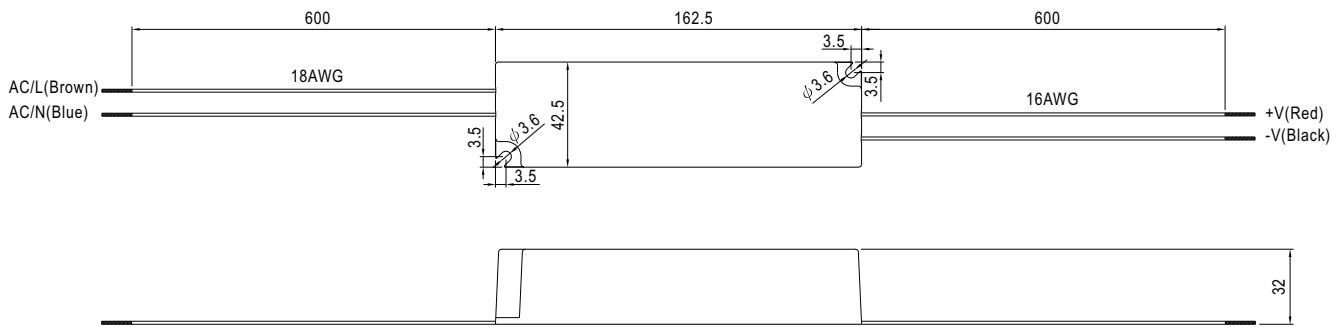
LPS IP67 (except for 34V) US (for 34V only)

### SPECIFICATION

MODEL	LPC-60-1050	LPC-60-1400	LPC-60-1750	
OUTPUT	DC VOLTAGE	48V	42V	34V
	DC VOLTAGE RANGE	9 ~ 48V	9 ~ 42V	9 ~ 34V
	CURRENT RANGE	1050mA	1400mA	1750mA
	RATED POWER	50.4W	58.8W	59.5W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%		
	LINE REGULATION	±1.0%		
	LOAD REGULATION	±2.0%		
	SETUP, RISE TIME Note.6	500ms, 120ms / 230VAC 500ms, 120ms / 115VAC at full load		
HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load			
INPUT	VOLTAGE RANGE	90 ~ 264VAC		
	FREQUENCY RANGE	47 ~ 63Hz		
	EFFICIENCY (Typ.)	87%	85%	87%
	AC CURRENT	1.2A/115VAC 0.7A/230VAC		
	INRUSH CURRENT(max.)	COLD STAR 30A/115VAC 60A/230VAC		
	LEAKAGE CURRENT	0.25mA / 240VAC		
PROTECTION	CURRENT LIMIT Note.4	±5% rated output current Protection type : Constant current limiting type		
	OVER VOLTAGE	50.4 ~ 60V	44.1 ~ 56.7V	39.1 ~ 45.9V
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to output load 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	UL1310 Class 2, CAN/CSA C22.2 No. 223-M91(for 34V only), IP67 approved, design refer to TUV EN60950-1, EN61347-2-13		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C / 70% RH		
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B		
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3		
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A		
	MTBF	732Khrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	162.5*42.5*32mm (L*W*H)		
	PACKING	0.4Kg; 32pcs/13.8Kg/0.56CUFT		
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>5. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>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.</li> </ol>			

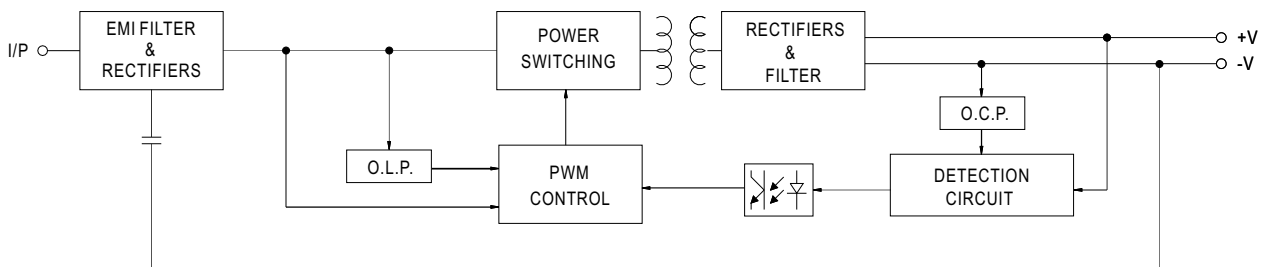
**Mechanical Specification**

Case No. 976A Unit:mm

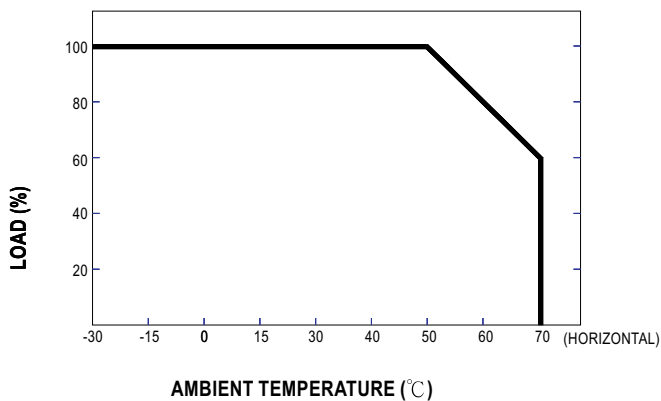


**Block Diagram**

fosc : 60KHz



**Derating Curve**



**Static Characteristics**

