



100W Single Output LED Power Supply

LPC-100 series



IP67  CE  UK  CB

## ■ Features

- Constant current design
- Universal AC input/full range
- Withstand 300VAC surge input for 5 seconds
- High efficiency up to 90%
- Protections: Short circuit / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level (Note.6)
- Fully isolated plastic case
- Class II power unit, no FG
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty (Note.4)

## ■ Applications

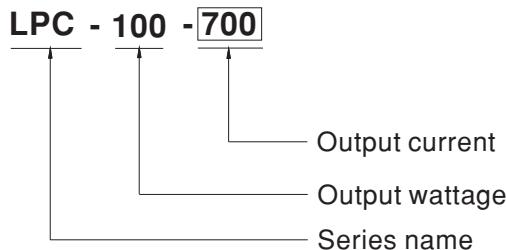
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.9)

## ■ Description

LPC-100 series is one 100W single output AC/DC LED switching power supply. It features the constant current design, providing various models with the output current ranging from 350mA through 2100mA the LED lighting applications employ the most frequently.

LPC-100 operates for the range 90~264VAC so it can perfectly work for most of the countries in the world. The whole series is based on class II (without FG pin) design, housed with a 94V-0 flame retardant plastic case. With the working efficiency up to 90%, LPC-100 can work at the ambient temperature between -25°C~+50°C under air convection.

## ■ Model Encoding





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## SPECIFICATION

MODEL	LPC-100-350	LPC-100-500	LPC-100-700	LPC-100-1050	LPC-100-1400	LPC-100-1750	LPC-100-2100
OUTPUT	<b>RATED CURRENT</b>	350mA	500mA	700mA	1050mA	1400mA	1750mA
	<b>CURRENT ACCURACY</b>	±5.0%					
	<b>CONSTANT CURRENT REGION Note.5</b>	143 ~ 286V	100 ~ 200V	72 ~ 143V	48 ~ 96V	36 ~ 72V	29 ~ 58V
	<b>RATED POWER</b>	100.1W	100W	100.1W	100.8W	100.8W	100.8W
	<b>RIPLE CURRENT</b>	±5%					
	<b>RIPLE &amp; NOISE</b>	1.5Vp-p	1.5Vp-p	1Vp-p	1Vp-p	1Vp-p	1Vp-p
	<b>LINE REGULATION</b>	±1%					
	<b>VOLTAGE TOLERANCE</b>	±1.5%					
	<b>SETUP, RISE TIME</b>	1000ms, 80ms / 230VAC	2000ms, 80ms / 115VAC				
INPUT	<b>HOLD UP TIME (Typ.)</b>	16ms / 230VAC	10ms / 115vac	at full load			
	<b>VOLTAGE RANGE Note.2</b>	90 ~ 264VAC	127VDC ~ 370VDC				
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz					
	<b>EFFICIENCY (Typ.)</b>	90%		89.5%		89%	
	<b>AC CURRENT (Typ.)</b>	2.2 A / 115VAC	1.2A / 230VAC				
	<b>INRUSH CURRENT (Typ.)</b>	COLD START 75A(twidth=980μs measured at 50% Ipeak) at 230VAC					
	<b>MAX. No. of PSUs on 16A CIRCUIT BREAKER</b>	1 units (circuit breaker of type B) / 2 units (circuit breaker of type C) at 230VAC					
PROTECTION	<b>LEAKAGE CURRENT</b>	<0.25mA / 240VAC					
	<b>SHORT CIRCUIT</b>	Hiccup mode, recovers automatically after fault condition is removed					
	<b>OVER VOLTAGE</b>	315 ~ 345V	220 ~ 240V	160 ~ 172V	108 ~ 120V	80 ~ 97V	65 ~ 80V
		Protection type : Shut down and latch off o/p voltage re-power on to recovery					
ENVIRONMENT	<b>WORKING TEMP.</b>	-25 ~ +50°C (Refer to "Derating Curve")					
	<b>WORKING HUMIDITY</b>	10 ~ 95% RH non-condensing					
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +80°C, 10 ~ 95% RH					
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)					
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC	<b>SAFETY STANDARDS</b>	IEC 62368-1;EAC TP TC 004, IP67 approved, Design refer to BS EN/EN62368-1					
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC					
	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH					
	<b>EMC EMISSION</b>	Compliance to BS EN/EN55032(CISPR32) Class B; BS EN/EN61000-3-2 Class A (≤80% load); BS EN/EN61000-3-3, EAC TP TC 020					
	<b>EMC IMMUNITY</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55024, light industry level, criteria A, EAC TP TC 020					
OTHERS	<b>MTBF</b>	511Khrs min. MIL-HDBK-217F (25°C)					
	<b>DIMENSION</b>	190*52*37mm (L*W*H)					
	<b>PACKING</b>	0.61Kg; 20pcs / 13.2Kg / 0.55CUFT					
<b>NOTE</b>	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Derating may be needed under low input voltages. Please check the static characteristics for more details.</li> <li>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.</li> <li>Refer to warranty statement.</li> <li>Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</li> <li>Suitable for indoor use or outdoor use without direct sunlight exposure, please avoid immerse in the water over 30minutes.</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> <li>For any application note and IP water proof function installation caution, please refer our user manual before using. <a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></li> <li>This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NPF/XLG series are recommended.)</li> <li>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. ※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></li> </ol>						

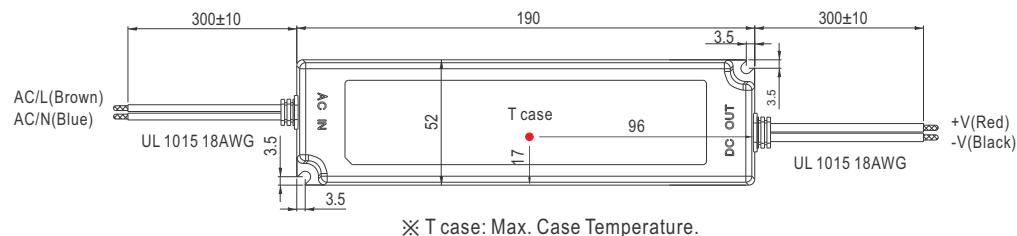


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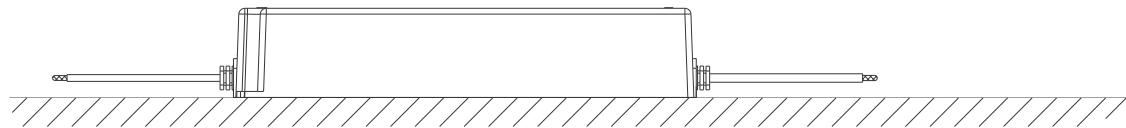
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### ■ Mechanical Specification

Case No. LPC-100 Unit:mm

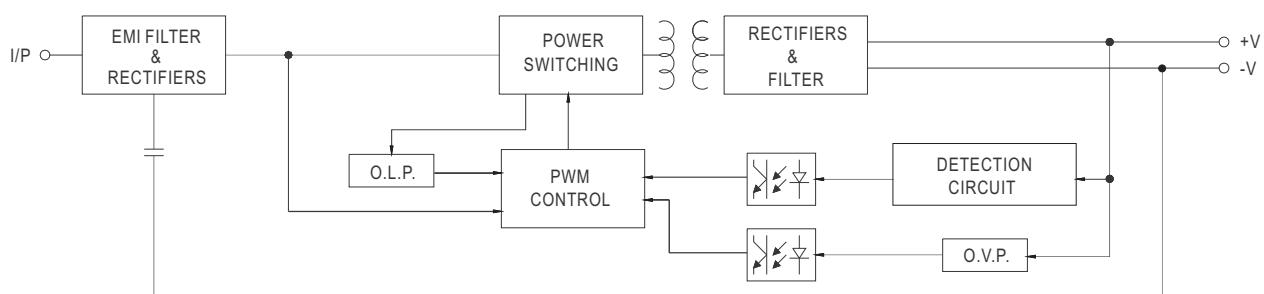


### ■ Recommend Mounting Direction



### ■ Block Diagram

fosc : 67KHz



### ■ Derating Curve

### ■ Static Characteristics

