



MEAN WELL LPC-100 Series 100W Single Output LED Power Supply Owner's Manual

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MEAN WELL LPC-100 Series 100W Single Output LED Power Supply



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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)

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

LPC - 100 - 700

Output current

Output wattage

Series name

Applications

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

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

SPECIFICATION

MODEL		LPC-100-350	LPC-100-500	LPC-100-700	LPC-100-1050	LPC-100-1400	LPC-100-1750	LPC-100-2100
	RATED CURRENT	350mA	500mA	700mA	1050mA	1400mA	1750mA	2100mA
	CURRENT ACCURACY	±5.0%						
	CONSTANT CURRENT REGION Note.5	143 ~ 286V	100 ~ 200V	72~143V	48 ~ 96V	36 ~ 72V	29 ~ 58V	24 ~ 48V

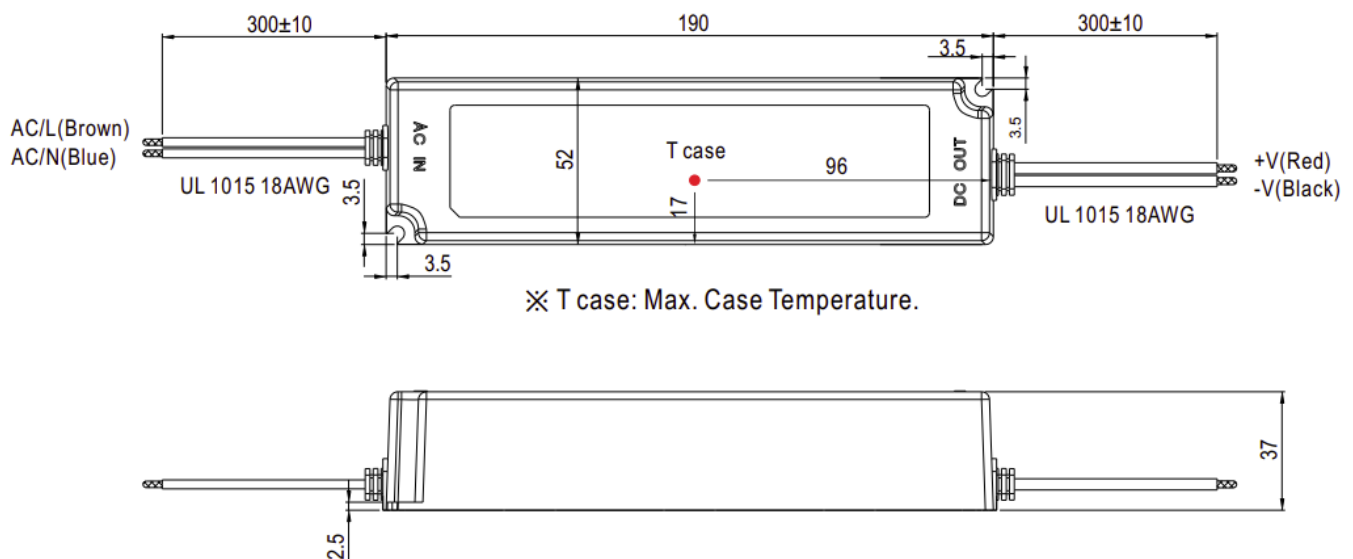
OUTP UT	RATED POWER	100.1W	100W	100.1W	100.BW	100.BW	101.5W	100.BW
	RIPPLE CURRE NT	±5%						
	RIPPLE & NOISE	1.5Vp-p	1.5Vp-p	1Vp-p	1Vp-p	1Vp-p	1Vp-p	1Vp-p
	LINE REGULATI ON	±1%						
	VOLTAGE TOLE RANCE	±1.5%						
	SETUP, RISE TI ME	1000ms, 80ms/ 230VAC 2000ms,80ms/115VAC at full load						
	HOLD UP TIME (Typ.)	16ms/230VAC 10ms/115vac at full load						
INPUT	VOLTAGE RANG E Note.2	90 – 264VAC 127VDC – 370VDC						
	FREQUENCY RA NGE	47 ~ 63Hz						
	EFFICIENCY (Ty p.)	90%				89.5%		89%
	AC CURRENT (T yp.)	2.2A/ 115VAC 1.2A / 230VAC						
	INRUSH CURRE NT (Typ.)	COLD START 75A(twidth=980µs measured at 50% Ipeak) at 230VAC						

	VIBRATION	10 – 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY & EMC	SAFETY STANDARDS	IEC 62368-1 ;EAC TP TC 004, IP67, BS EN/EN62368-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P 3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:1DOM Ohms/ 500VDC / 25°C/ 70% RH		
	EMC EMISSION	Compliance to BS EN/EN55032(CISPR32) Class B; BS EN/EN61000-3-2 Class A (;cc 80% load); BS EN/EN61000-3-3, EAC TP TC 020		
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level , EAC TP TC 020		
OTHERS	MTBF	4121.8K hrs min. Telcordia SR-332 (Bellcore) ; 511.2K hrs min.	MIL-HDBK-217F (25 °C)	
	DIMENSION	190*52*37mm (L*W*H)		
	PACKING	0.61Kg;20pcs/13.2Kg/0.55CUFT		

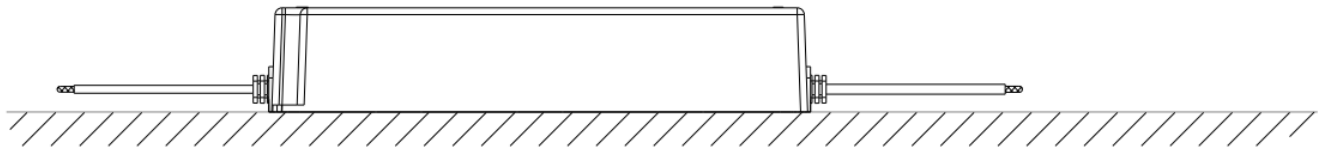
NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
 2. Derating may be needed under low input voltages. Please check the static characteristics for more details.
 3. 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.
 4. Refer to warranty statement.
 5. 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.
 6. Suitable for indoor use or outdoor use without direct sunlight exposure, please avoid immerse in the water over 30minutes.
 7. 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).
 8. 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
 9. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NP F/XLG series are recommended.)
- Product Liability Disclaimer : For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

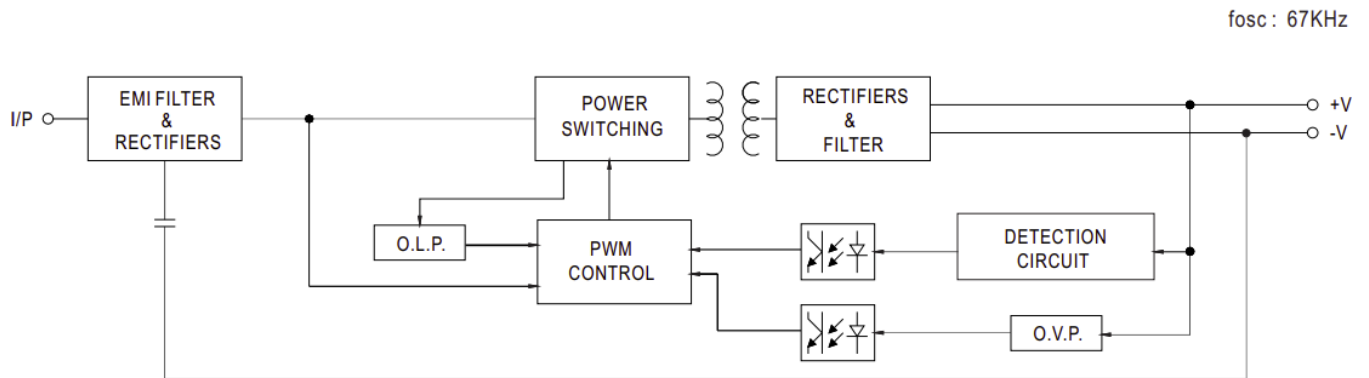
Mechanical Specification



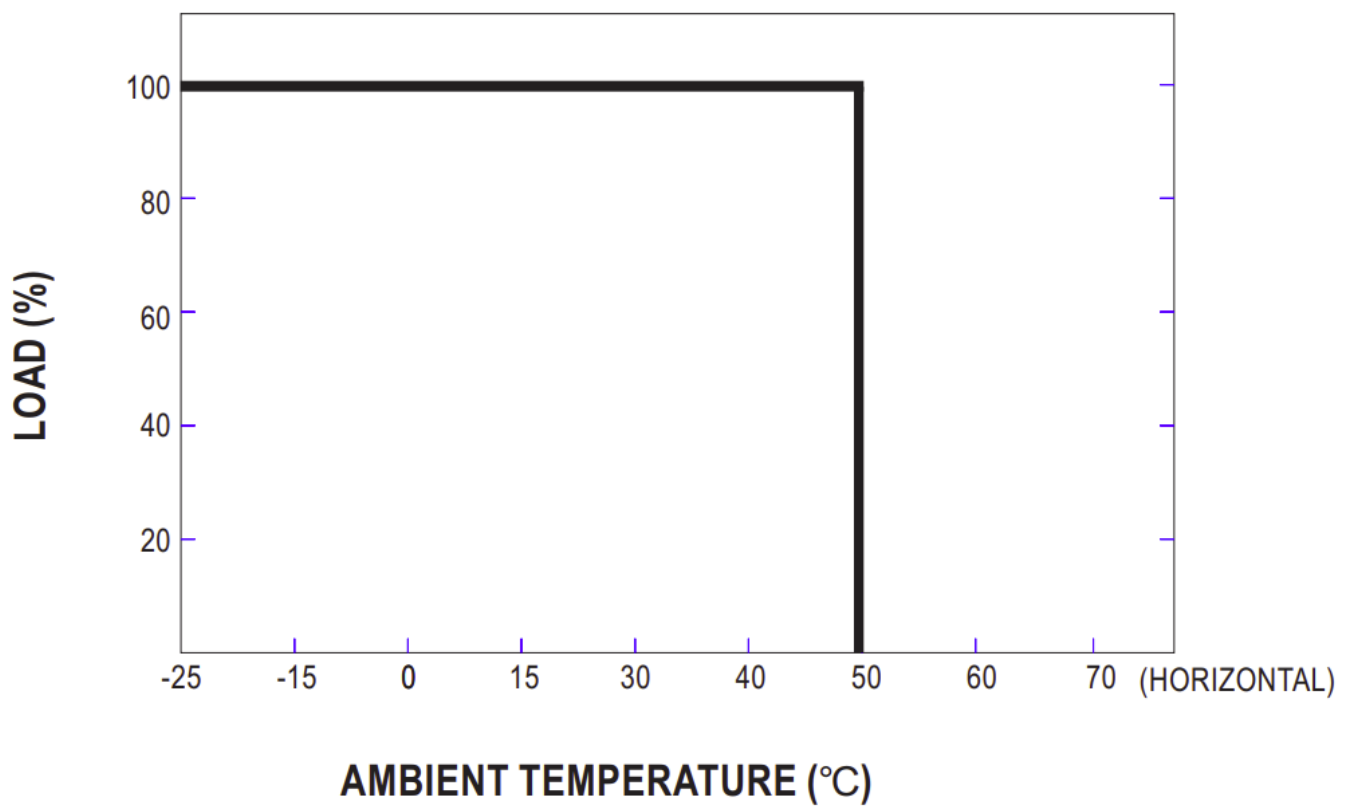
Recommend Mounting Direction



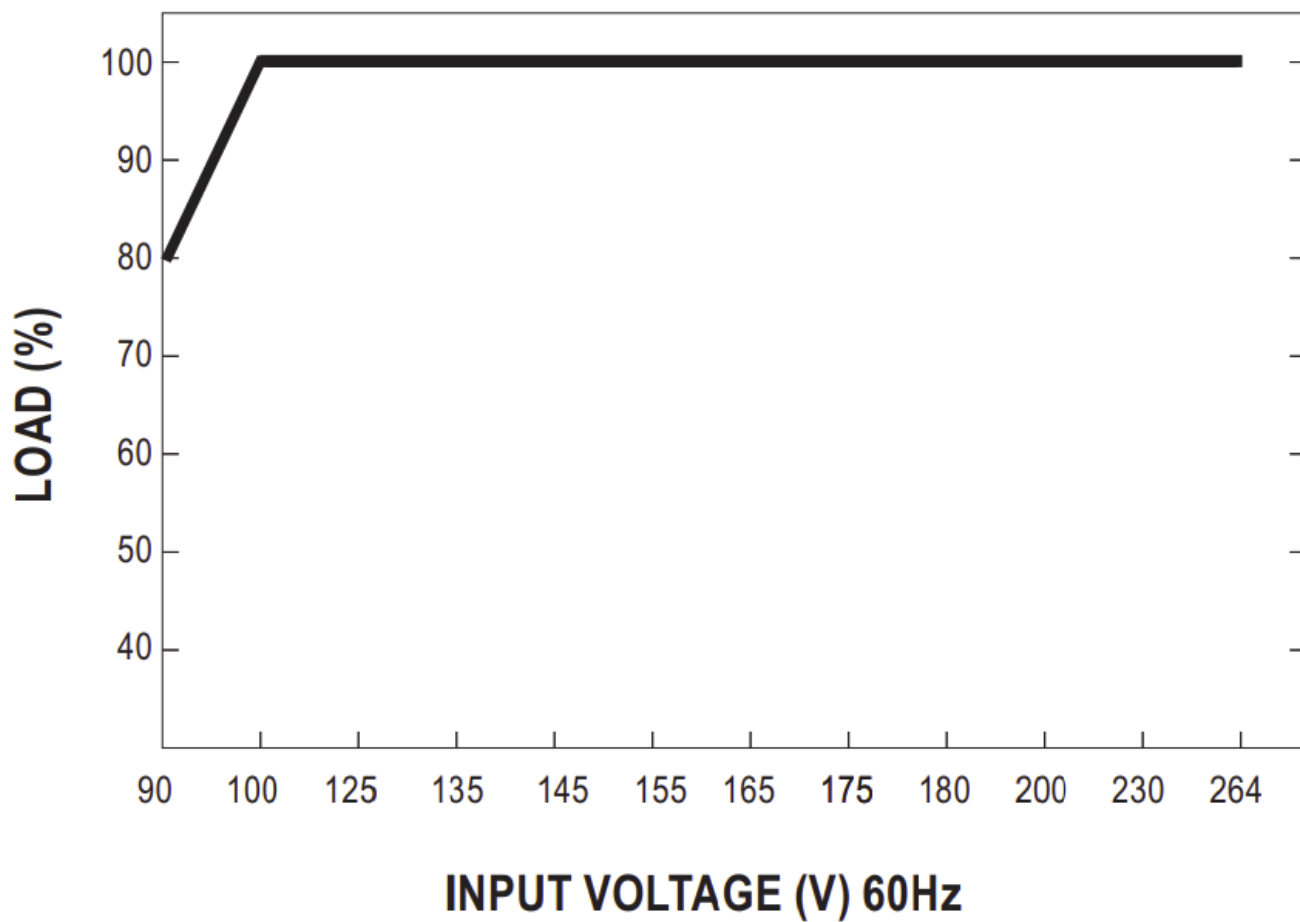
Block Diagram



Derating Curve




Static Characteristics



□ IP67 EAC C E UK CA CB



Documents / Resources

	<p>MEAN WELL LPC-100 Series 100W Single Output LED Power Supply [pdf] Owner's Manual LPC-100 Series, 100W Single Output LED Power Supply, LPC-100 Series 100W Single Output LED Power Supply, Single Output LED Power Supply, Output LED Power Supply, LED Power Supply, Power Supply, Supply</p>
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References

- [MEAN WELL Product Liability Disclaimer-MEAN WELL Switching Power Supply Manufacturer](#)