

**MEAN WELL LPC-20 series  
Switching Power Supply**



# MEAN WELL LPC-20 series Switching Power Supply Owner's Manual

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## MEAN WELL LPC-20 series Switching Power Supply



## Specifications

- **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.):** 200mVp-p
- **Input:**
  - **Voltage Range:** 90 ~ 264VAC, 127 ~ 370VDC
  - **Frequency Range:** 47 ~ 63Hz
- **Efficiency (Typ.):** 83%
- **Working Temperature:** -30~ +70 (Refer to Derating Curve)
- **Safety Standards:** UL879, UL1310, IEC/BS EN/EN 62368-1, EAC TP TC 004, IP67 approved
- **Dimensions:** 118\*35\*26mm (L\*W\*H)
- **Packing:** 0.22Kg; 60pcs/14.2Kg/0.72CUFT

## Product Usage Instructions

### Installation

1. Ensure input voltage and frequency match the specified range.
2. Connect the AC/N (Blue) and AC/L (Brown) wires for power input.
3. Connect the +V (Red) and -V (Black) wires for power output.
4. Mount the power supply in the recommended direction as per the mechanical specifications.

### Safety Guidelines

- Follow all safety standards and guidelines provided in the user manual to prevent electrical hazards.

### Maintenance

- Regularly check for any signs of damage or wear and tear. Ensure proper ventilation for the power supply unit.

## FAQ

**Q: What is the maximum number of power supplies that can be connected to a 16A circuit breaker?**

**A:** You can connect up to 8 units with a circuit breaker of type B or up to 14 units with a circuit breaker of type C at 230VAC.

**Q: What is the working temperature range of the power supply?**

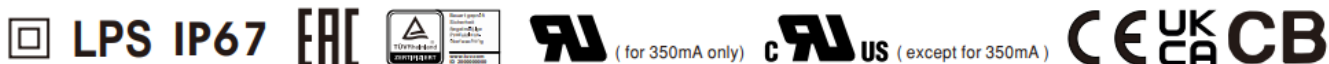
**A:** The power supply can operate in temperatures ranging from -30°C to +70°C, about the provided Derating Curve.

**Q: How should I handle inrush current during a cold start?**

**A:** The power supply has an inrush current of 0.35A/230VAC during cold start. Ensure proper handling to avoid any operational issues.

## 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-related fixtures or appliances such as LED Decoration or Advertisement devices) (Note.10)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty



## GTIN CODE

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



## SPECIFICATION

MODEL		LPC-20-350	LPC-20-700
	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

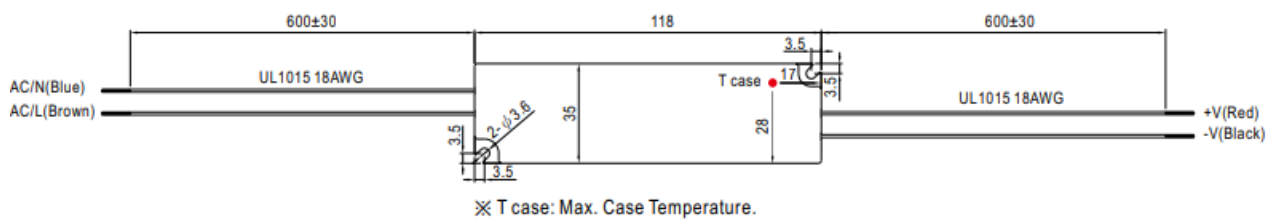
OUT PUT	VOLTAGE TOLERANCE Note.3		±5.0%	
	CURRENT ACCURACY		±5.0%	
	LINE REGULATION		±1.0%	
	LOAD REGULATION		±2.0%	
	SETUP, RISE TIME	Note. 6	500ms, 250ms / 230VAC    500ms, 250ms / 115VAC at full load	
	HOLD UP TIME (Typ.)		50ms/230VAC                      16ms/115VAC at full load	
INP UT	VOLTAGE RANGE	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	
PRO TEC TION	OVERVOLTAGE		50.4 ~ 60V	31.5 ~ 40.5V
			Protection type: Shut off o/p voltage, clamping by Zener diode	
ENV IRO NM ENT	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. COEF FICIENT	±0.03%/°C (0 ~ 50°C)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along the X, Y, and 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),  IEC/BS EN/EN 62368-1, EAC TP TC 004, 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 BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class A, 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	5708.9K hrs min. Telcordia SR-332 (Bellcore); 700.1K hrs min.	MIL-HDBK-217F (25°C)	
	DIMENSION	118*35*26mm (L*W*H)		
	PACKING	0.22Kg; 60pcs/14.2Kg/0.72CUFT		

## 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 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 the EMC Directive on the complete installation.  
  
(as available on [https://www.meanwell.com//Upload/PDF/EMI\\_statement\\_en.pdf](https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf))
  6. Length of set up time is measured at the first cold start. Turning ON/OFF the power supply may lead to an increase in the set-up time.
  7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immersing in the water for over 30 minutes.
  8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitudes higher than 2000m(6500ft).
  9. For any application note and IP waterproof function installation caution, please refer to our user manual before using. <https://www.meanwell.com/Upload/PDF/LEDEN.pdf>
  10. This product is not intended for LED lighting luminaire applications in the EU. (In the EU the LPF/NPF/XLG series are recommended.)
- ※ Product Liability Disclaimer For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

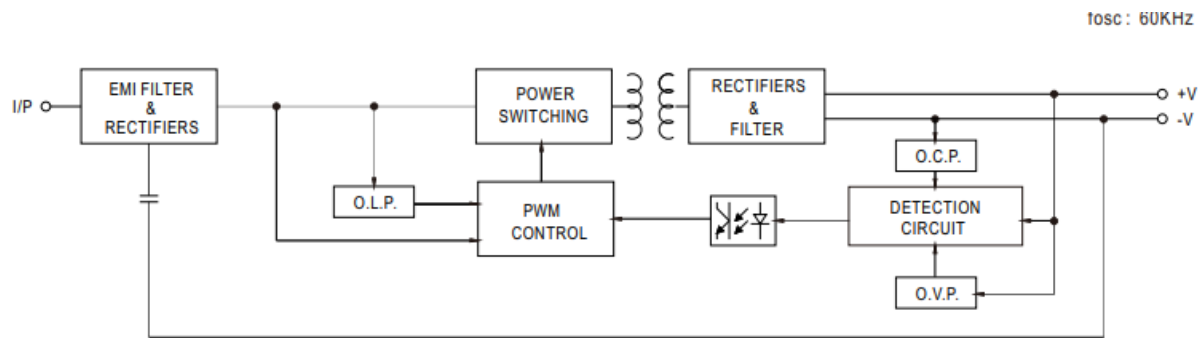
## Mechanical Specification



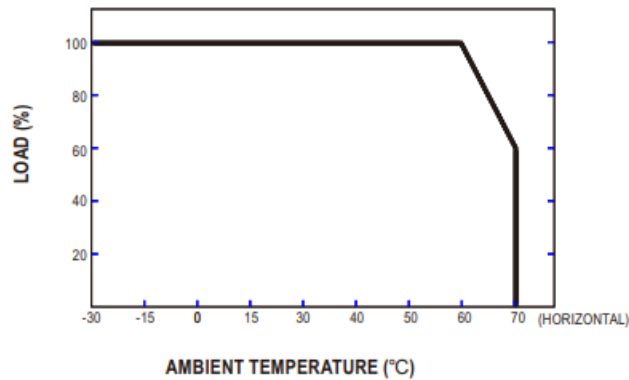
## Recommend Mounting Direction



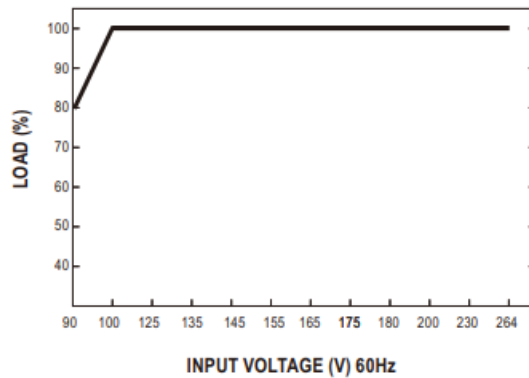
## Block Diagram



## Derating Curve



## Static Characteristics



## Documents / Resources



[MEAN WELL LPC-20 series Switching Power Supply](#) [pdf] Owner's Manual  
LPC-20-350, LPC-20-700, LPC-20 series Switching Power Supply, LPC-20 series, Switching Power Supply, Power Supply, Supply

## References

- [TÜV Rheinland - Home | US | TÜV Rheinland](#)
- [User Manual](#)