# 18W Single Output Switching Power Supply — LPH-18 series



## Features :

- 180-264VAC input only
- Fully encapsulated with IP67 level (Note.5)
- Protections:Short circuit / Overload / 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 related fixture or appliance (such as LED Decoration or Advertisement devices)
- High reliability / Low cost
- 2 years warranty

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## GTIN CODE

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

## SPECIFICATION

LPS IP67 IS15885 (NOTE 8)

| MODEL | | LPH-18-12 | LPH-18-24 | LPH-18-36 |
|---|---|---|---|---|
| OUTPUT | DC VOLTAGE | 12V | 24V | 36V |
| | RATED CURRENT | 1.5A | 0.75A | 0.5A |
| | CURRENT RANGE | 0 ~ 1.5A | 0 ~ 0.75A | 0 ~ 0.5A |
| | RATED POWER | 18W | 18W | 18W |
| | RIPPLE & NOISE (max.) Note.2 | 120mVp-p | 150mVp-p | 200mVp-p |
| | VOLTAGE TOLERANCE Note.3 | ±3.0% | | |
| | LINE REGULATION | ±1.0% | | |
| | LOAD REGULATION | ±2.0% | | |
| | SETUP, RISE TIME | 1500ms, 30ms / 230VAC | | |
| | HOLD UP TIME (Typ.) | 50ms/230VAC at full load | | |
| INPUT | VOLTAGE RANGE | 180 ~ 264VAC 254 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | |
| | EFFICIENCY(Typ.) | 77% | 82% | 83% |
| | AC CURRENT | 0.3A/230VAC | | |
| | INRUSH CURRENT(Typ.) | COLD START 50A(twidth=155μs measured at 50% Ipeak) at 230VAC | | |
| | MAX. No. of PSUs on 16A CIRCUIT BREAKER | 17 units (circuit breaker of type B) / 28 units (circuit breaker of type C) at 230VAC | | |
| | LEAKAGE CURRENT | 0.25mA / 240VAC | | |
| PROTECTION | OVERLOAD | Above 105% rated output power | | |
| | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | |
| | OVER VOLTAGE | 13.8~ 16.2V | 27.6~ 32.4V | 41.4 ~ 48.6V |
| | | Protection type : Shut off o/p voltage, clamping by zener diode | | |
| | OVER TEMPERATURE | Hiccup mode, recovers automatically after temperature goes down | | |
| ENVIRONMENT | WORKING TEMP. | -30~ +70℃ (Refer to "Derating Curve") | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +80℃, 10 ~ 95% RH | | |
| | TEMP. COEFFICIENT | ±0.03%/℃ (0 ~ 50℃) | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | IEC/BS EN/EN 62368-1, BIS IS15885(NOTE 8), EAC TP TC 004, IP67 approved; design refer to UL1310 Class 2, CAN/CSA No. 223-M91 | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | |
| | ISOLATION RESISTANCE | I/P-O/P:>100M Ohms / 500VDC / 25℃ / 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 | 7827.3K hrs min. Telcordia SR-332 (Bellcore) ; 1311.1Khrs min. MIL-HDBK-217F (25℃) | | |
| | DIMENSION | 140*30*22(L*W*H) | | |
| | PACKING | 0.175Kg; 70pcs/13.3Kgs/0.71CUFT | | |

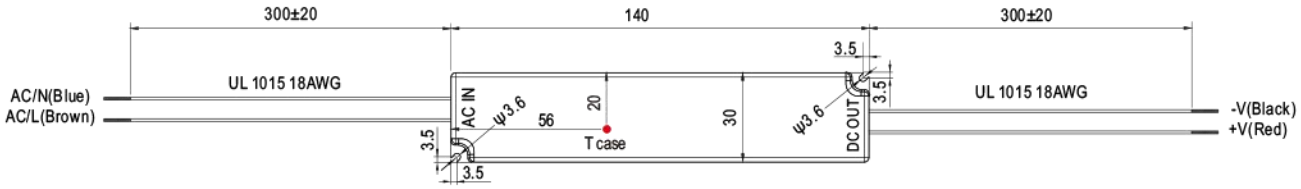
**NOTE**

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. 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. (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
5. Suitable for indoor use or outdoor use without direct sunlight exposure.
6. This product is not intended for LED applications in the EU and China.(In the EU NPF/LPF/XLG series are recommended.)
7. Products sourced from the China regions may not have the BIS logo, please contact your MEAN WELL sales for more information.

※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

## ■ Mechanical Specification

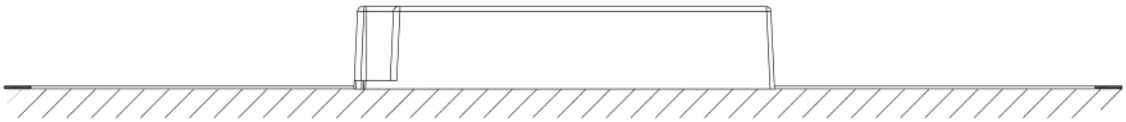
Unit:mm Tolerance:±1




※ T case: Max. Case Temperature

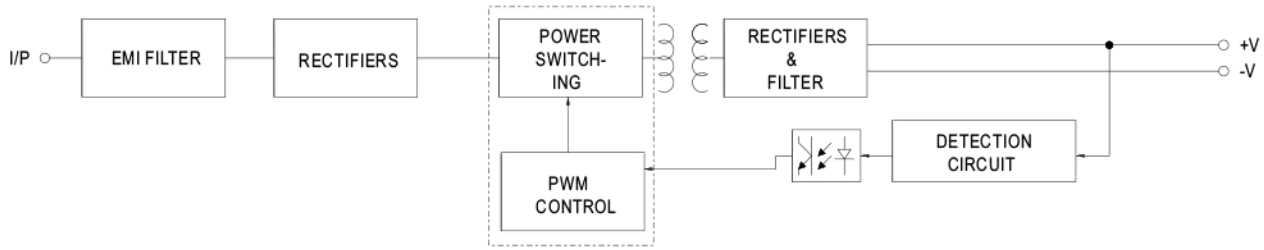



## ■ Recommend Mounting Direction

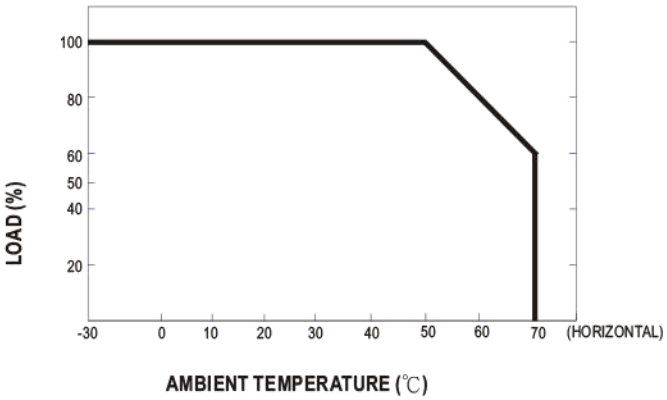


## ■ Block Diagram

fosc : 60KHz

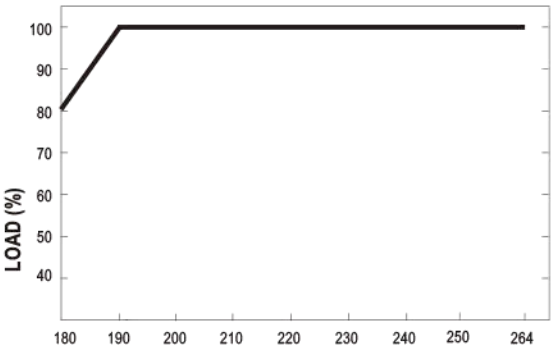



## ■ Derating Curve




AMBIENT TEMPERATURE (℃)

## ■ Static Characteristics




INPUT VOLTAGE (VAC) 60Hz