User's Manual





#### ■ Features :

- Constant voltage design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over load / 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 fixture or appliance (such as LED Decoration or Advertisement devices)(Note.11)
- 100% full load burn-in test
- · Low cost, high reliability
- · 2 years warranty







### **■** GTIN CODE

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

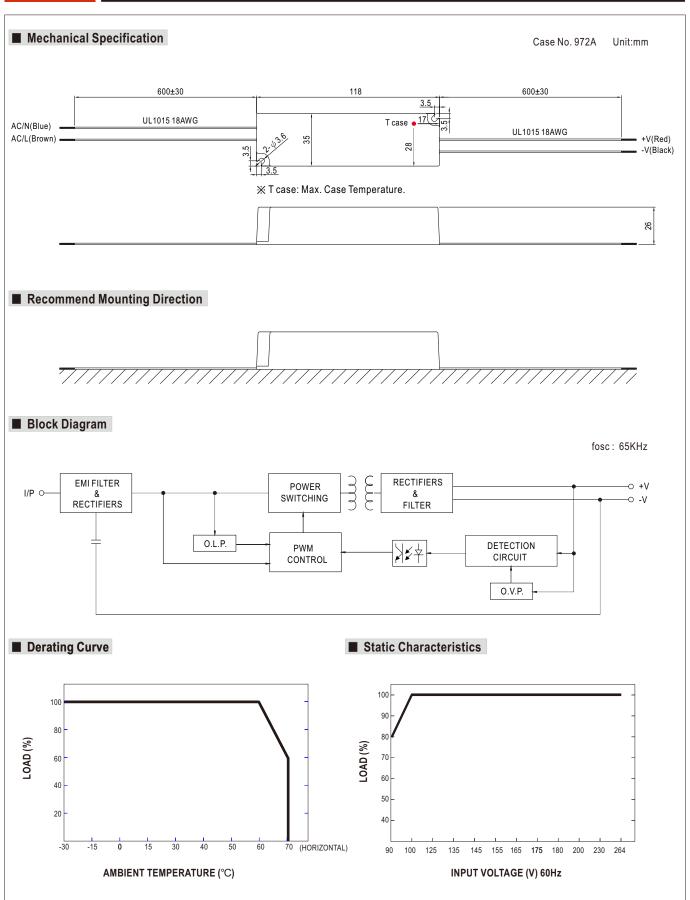
#### **SPECIFICATION**

| MODEL        |  | LPV-20-5   | LPV-20-12  | LPV-20-15  | LPV-20-24 |
|--------------|--|--|------------|------------|-----------|
| ОИТРИТ       | DC VOLTAGE                                 | 5V   | 12V        | 15V        | 24V       |
|              | RATED CURRENT                              | 3A   | 1.67A      | 1.33A      | 0.84A     |
|              | CURRENT RANGE                              | 0 ~ 3A   | 0 ~ 1.67A  | 0 ~ 1.33A  | 0 ~ 0.84A |
|              | RATED POWER                                | 15W  | 20W        | 20W        | 20.2W     |
|              | RIPPLE & NOISE (max.) Note.2               | 80mVp-p  | 120mVp-p   | 120mVp-p   | 150mVp-p  |
|              | VOLTAGE TOLERANCE Note.3                   | ±5.0%  |            |            |           |
|              | LINE REGULATION                            | ±1.0%  |            |            |           |
|              | LOAD REGULATION                            | ±2.0%  |            |            |           |
|              | SETUP, RISE TIME Note.6                    | 500ms, 20ms / 230VAC 500ms, 20ms / 115VAC at full load   |            |            |           |
|              | HOLD UP TIME (Typ.)                        | 50ms/230VAC 16ms/115VAC at full load   |            |            |           |
| INPUT        | VOLTAGE RANGE Note.4                       | 90 ~ 264VAC 127 ~ 370VDC   |            |            |           |
|              | FREQUENCY RANGE                            | 47 ~ 63Hz  |            |            |           |
|              | EFFICIENCY (Typ.)                          | 77%  | 81%        | 83%        | 83%       |
|              | AC CURRENT (Typ.)                          | 0.55A/115VAC   |            |            |           |
|              | INRUSH CURRENT(Typ.)                       | COLD START 70A(twidth=215µs measured at 50% lpeak) at 230VAC   |            |            |           |
|              | MAX. No. of PSUs on 16A<br>CIRCUIT BREAKER | 8 units (circuit breaker of type B) / 14 units (circuit breaker of type C) at 230VAC   |            |            |           |
|              | LEAKAGE CURRENT                            | 0.25mA / 240VAC  |            |            |           |
| PROTECTION   | OVER LOAD                                  | 110 ~ 150% rated output power  |            |            |           |
|              | OVERCOAD                                   | Protection type: Hiccup mode, recovers automatically after fault condition is removed  |            |            |           |
|              | OVER VOLTAGE                               | 5.75 ~ 6.75V   | 13.8 ~ 16V | 17.5 ~ 21V | 28 ~ 32V  |
|              |  | Protection type : Shut off o/p voltage, clamping by zener diode  |            |            |           |
| ENVIRONMENT  | 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. 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                           | UI879, UL1310, CSA C22.2 No. 207-M89,CAN/CSA C22.2 No. 223-M91,IEC/BS EN/EN 62368-1, IS 15885(Part2/Sec13)(NOTE 12), 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                                       | 6025.8K hrs min. Telcordia SR-332 (Bellcore); 786.5Khrs min. MIL-HDBK-217F (25°ℂ)  |            |            |           |
|              | DIMENSION                                  | 118*35*26mm (L*W*H)  |            |            |           |
|              | PACKING                                    | 0.22Kg; 60pcs/14.2Kg/0.72CUF   | Т          |            |           |

#### 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 EMC Directive on the complete installation again. (as available on https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
- 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.
- 7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.
- 8. 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).
- 9. Products sourced from the Americas regions may not have the TUV/BIS/CCC logo. Please contact your MEAN WELL sales for more information.
- 10. 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
- 11. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NPF/XLG series are recommended.)
- 12. Products sourced from the China regions may not have the BIS logo, please contact your MEAN WELL sales for more information.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx





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## MEAN WELL:

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