



### 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

User's Manual



### GTIN CODE

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


### SPECIFICATION

| MODEL               |                                             | LPV-20-5                                                                                                                                         | LPV-20-12  | LPV-20-15  | LPV-20-24 |
|---------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|-----------|
| OUTPUT              | 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.) <small>Note.2</small> | 80mVp-p                                                                                                                                          | 120mVp-p   | 120mVp-p   | 150mVp-p  |
|                     | VOLTAGE TOLERANCE <small>Note.3</small>     | ±5.0%                                                                                                                                            |            |            |           |
|                     | LINE REGULATION                             | ±1.0%                                                                                                                                            |            |            |           |
|                     | LOAD REGULATION                             | ±2.0%                                                                                                                                            |            |            |           |
|                     | SETUP, RISE TIME <small>Note.6</small>      | 500ms, 20ms / 230VAC    500ms, 20ms / 115VAC at full load                                                                                        |            |            |           |
| HOLD UP TIME (Typ.) | 50ms/230VAC        16ms/115VAC at full load |                                                                                                                                                  |            |            |           |
| INPUT               | VOLTAGE RANGE <small>Note.4</small>         | 90 ~ 264VAC        127 ~ 370VDC                                                                                                                  |            |            |           |
|                     | FREQUENCY RANGE                             | 47 ~ 63Hz                                                                                                                                        |            |            |           |
|                     | EFFICIENCY (Typ.)                           | 77%                                                                                                                                              | 81%        | 83%        | 83%       |
|                     | AC CURRENT (Typ.)                           | 0.55A/115VAC    0.35A/230VAC                                                                                                                     |            |            |           |
|                     | INRUSH CURRENT(Typ.)                        | COLD START 70A(twidth=215μs 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                                                                                                                                  |            |            |           |
| PROTECTION          | OVER LOAD                                   | 110 ~ 150% rated output power<br>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/0.72CUFT                                                                                                                    |            |            |           |

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

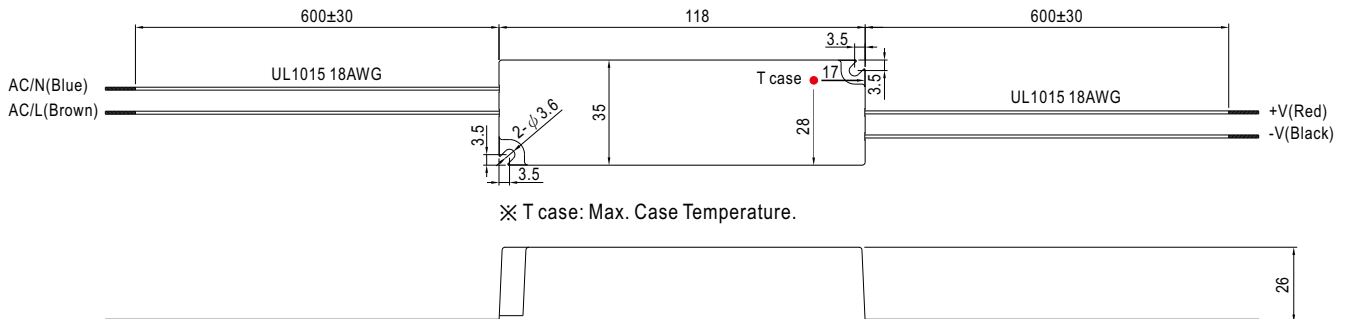


## 20W Single Output Switching Power Supply

# LPV-20 series

## ■ Mechanical Specification

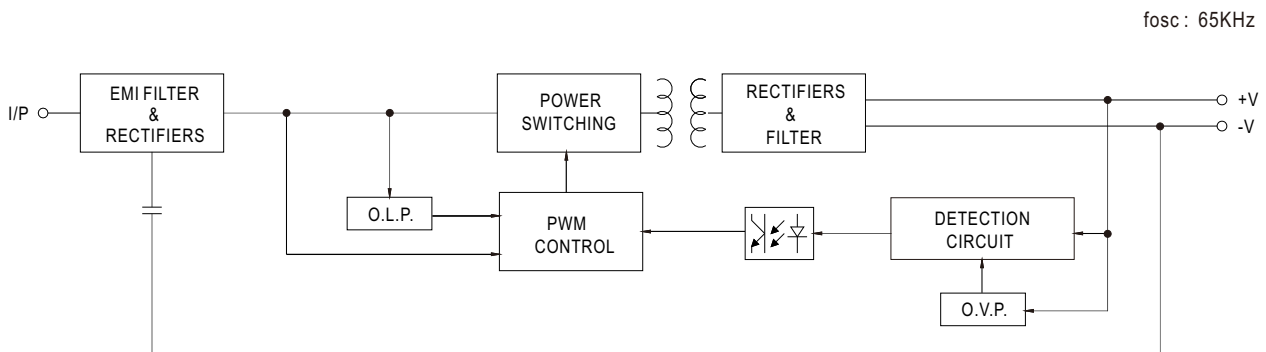
Case No. 972A      Unit:mm



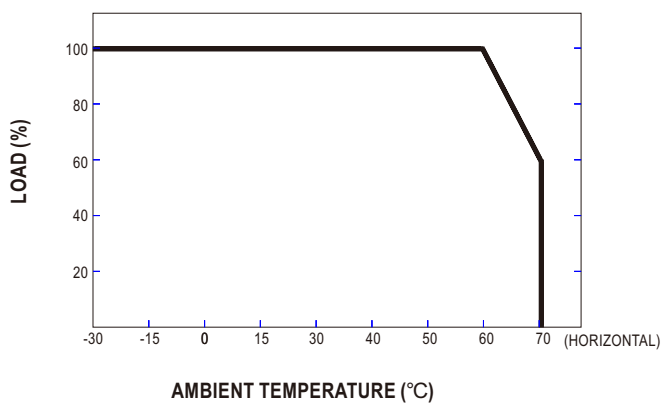
### ■ Recommend Mounting Direction



### ■ Block Diagram



### Derating Curve



### ■ Static Characteristics

