

#### Features:

- · Constant voltage design
- · Universal AC input range/withstand 300VAC surge input for 5 seconds
- · Fully encapsulated with IP67 level, Fully isolated plastic case, laser labeling
- · Protections: short circuit, over load, over voltage
- · Cooling by free air convection
- · Class II power unit,no FG:Class 2 power unit
- · Passed LPS(Limited Power Source) Test
- · 100% full load burn-in test
- · Suitable for LED lighting and moving sign applications
- High reliability/Low cost







| JI LOII IC     | Dimension: 14          | 8 × 40 × 30mm   | <ul> <li>3 Years warranty</li> </ul>             | •            | · · · <u></u> | II O / C Rous |
|----------------|------------------------|---|--|--------------|---------------|---------------|
|                | Model                  | LPV-35E-5   | LPV-35E-12                                       | LPV-35E-15   | LPV-35E-24    | LPV-35E-36    |
| Output         | DC voltage             | 5V  | 12V  | 15V          | 24V           | 36V           |
|                | Rated current          | 5A  | 3A   | 2.4A         | 1.5A          | 1A            |
|                | Current range          | 0 ~ 6A  | 0 ~ 3A   | 0 ~ 2.4A     | 0 ~ 1.5A      | 0 ~ 1A        |
|                | Rated power            | 30W   | 36W  | 36W          | 36W           | 36W           |
|                | Ripple&noise           | 80mVp-p   | 120mVp-p   | 120mVp-p     | 150mVp-p      | 150mVp-p      |
|                | Voltage tolerance      | ± 6.0% ± 5.0%   |  |              |               |               |
|                | Line regulation        | ± 1.0%  |  |              |               |               |
|                | Load regulation        | ± 4.0%  | ± 2.0%   |              |               |               |
|                | Setup,rise time        | 500ms,20ms/230VAC 500ms,20ms/115VACat full load   |  |              |               |               |
|                | Hold up time           | 50ms/230VAC 16ms/115VAC at full load  |  |              |               |               |
|                | Voltage range          | 90~264VAC   | 127~370VDC                                       |              |               |               |
| Input          | Efficiency             | 77%   | 84%  | 84%          | 85%           | 85%           |
|                | Frequency range        | 47~63Hz   |  |              |               |               |
|                | AC current             | 1.1A/115VAC 0.7A/230VAC   |  |              |               |               |
|                | Inrush current         | Cold start 55A/230VAC (twidth=510 µ s measured at 50%   peak)                                     |  |              |               |               |
|                | Leakage current        | < 0.25mA/240VAC   |  |              |               |               |
| Protection     | Overload               | 110~150% rated output power Start overload protection   |  |              |               |               |
|                |                        | Protection type: hiccup mode, auto-recovery after fault condition is removed                      |  |              |               |               |
|                | Over voltage           | 5.75~6.75V  | 13.8~16.2V                                       | 17.25~20.25V | 27.6~32.4V    | 41.4~48.6V    |
|                |                        | Protection type: Shut down output voltage,re-power on to recover                                  |  |              |               |               |
| Environment    | Working temperature    | -30°C ~ +65°C(Please refer to "derating curve")   |  |              |               |               |
|                | Working humidity       | 20%~90%RH Non-condensing  |  |              |               |               |
|                | Storage temp, humidity | -40°C ~ +80°C;10%∼95%RH   |  |              |               |               |
|                | Temp.coefficient       | ±0.03%/°C (0~50°C)  |  |              |               |               |
|                | Vibration              | 10~500Hz, 5G 10min./1Cycle, Period for 60min, Each axes   |  |              |               |               |
| Safety&<br>EMC | Safety standards       | TUV EN 62368-1,TUV EN 61347-2-13,IP67 approved;design refer to UL 1310 Class 2,CAN/CSA No.223-M91 |  |              |               |               |
|                | Withstand voltage      | I/P-O/P: 3KVAC  |  |              |               |               |
|                | Isolation resistance   | I/P-O/P: 100M Ohms/500VDC/25°C/70%RH  |  |              |               |               |
|                | EMC emission           | Compliance to EN55015(CISPR22)Class B,EN61000-3-2 Class A,EN61000-3-3                             |  |              |               |               |
|                | EMC immunity           | Compliance to EN61000-4-2,3,4,5,6,8,11,EN55024,light industry level,criteria A                    |  |              |               |               |
| Others         | MTBF                   | 710K hrs min. MIL−HDBK−217F(25°C)   |  |              |               |               |
|                | Dimension              | 148*40*30 mm ( L*W*H )  |  |              |               |               |
|                | Packing                | 0.32kg/50pcs/   | 0.32kg/50pcs/16kgs/0.027m <sup>3</sup> /0.95CUFT |              |               |               |
|                |                        |   |  |              |               |               |

Note: 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

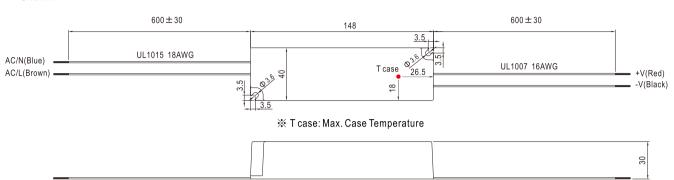
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. The power supply is considered as a component that will be operated in combination 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.
- 5. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.
- 6.Derating may be needed under low input voltage. Please check the static characteristics for more details.
- 7.Length of set uo time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
- 8.LPV-35E-5 can provide 6A of output current continuously.



# Mechanical specification

Unit:mm

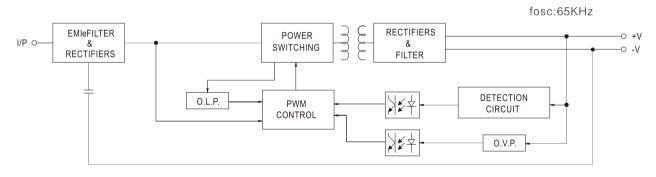




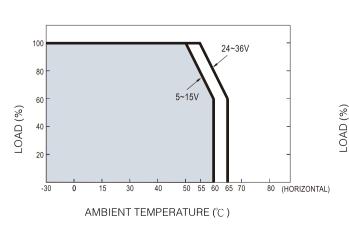
### **Recommend Mounting Direction**



## Block diagram



## Derating curve



#### Static characteristic

