

# UTD-150

## LED Ultra-Thin Power Supply(C&V)

- Universal AC input/full range(100-277VAC)
- Built in active PFC function
- Efficiency up to 93%, super thin and small size.
- Protections:short circuit/over load/over voltage/over temperature
- IP67 design for indoor or outdoor installation
- It can be used in dry,wet and rainy environment
- Cooling by free air, high reliability
- Up to 50000-hour life time
- Suitable for internal lights application for I / II / III.
- Widely used in LED lighting and IT equipment
- Compliance to worldwide safety regulation for led lightings.

100-277VAC

PF>0.96

THD≤5%



### Specification

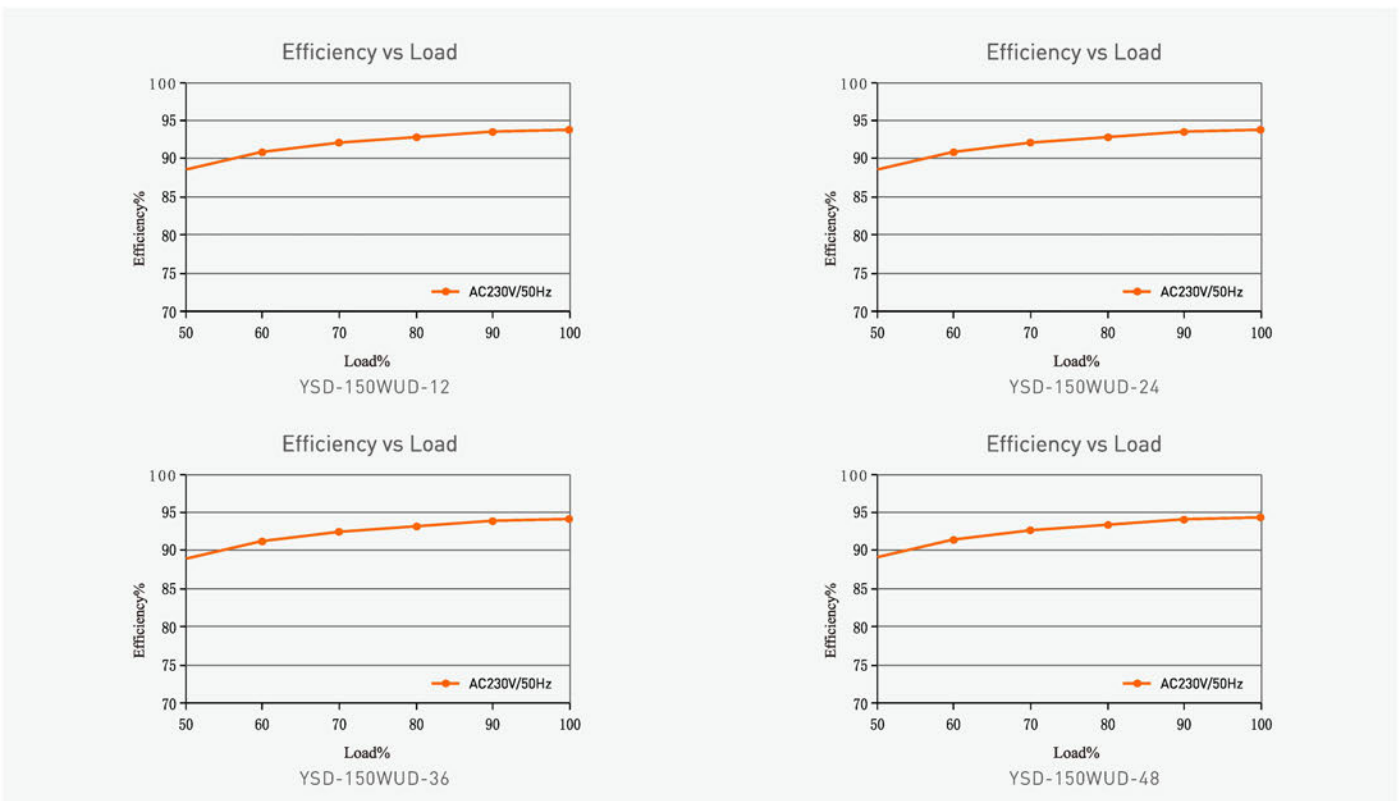
| Model                           | UTD-12-150   | UTD-24-150  | UTD-36-150   | UTD-48-150   |              |
|---------------------------------|--|---|--------------|--|--------------|
| OUTPUT                          | Output voltage   | 12VDC   | 24VDC        | 36VDC  | 48VDC        |
|                                 | Output voltage range   | 12VDC±0.3VDC  | 24VDC±0.6VDC | 36VDC±0.9VDC   | 48VDC±1.2VDC |
|                                 | Output current   | Max 12.5A   | Max 6.25A    | Max 4.17A  | Max 3.2A     |
|                                 | Output power   | Max 150W  |              |  |              |
|                                 | Output power range   | 0-150W  |              |  |              |
|                                 | Ripple & Noise   | ≤170mV  | ≤250mV       | ≤250mV   | ≤250mV       |
|                                 | Linear Regulation  | ±1%   |              |  |              |
|                                 | Load Regulation  | ±1%   |              |  |              |
|                                 | Start-up Time (Typ)  | 320ms/230VAC  | 400ms/115VAC |  |              |
|                                 | Rise Time(Typ)   | 11ms/230VAC   | 11ms/115VAC  |  |              |
| Hold Up Time(Typ)               | 19ms/230VAC  | 19ms/115VAC   |              |  |              |
| INPUT                           | Input voltage  | 100-277Vac  |              |  |              |
|                                 | Frequency  | 50/60Hz   |              |  |              |
|                                 | Input current  | 1.68~0.65A  |              |  |              |
|                                 | Power factor   | PF>0.96/230Vac, at full load; PF>0.98/115Vac, at full load  |              |  |              |
|                                 | No-load power consumption  | < 0.5W  |              |  |              |
|                                 | THD  | ≤8% at 230Vac,at full load; ≤5% at 115Vac,at full load  |              |  |              |
|                                 | Efficiency (typ.)  | 93%   | 93.5%        | 94%  | 94%          |
|                                 | Inrush current(typ.)   | 50A/230VAC  |              |  |              |
|                                 | Control surge capability   | L,N:2KV L,N-PE:4KV  |              |  |              |
| Leakage current                 | Max. 0.5mA   |   |              |  |              |
| ENVIRONMENT                     | Working temperature  | ta: -30°C ~ 50°C tc: 80°C   |              |  |              |
|                                 | Working humidity   | 20 ~ 99%RH, condensing(Waterproof)  |              |  |              |
|                                 | Storage temp., humidity  | -40°C ~ 80°C, 10~95%RH  |              |  |              |
|                                 | Vibration  | 10-500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.  |              |  |              |
| PROTECTION                      | Overtemperature  | Protection type: Turn off the output voltage, after the temperature drops, re-energize to restore.                              |              |  |              |
|                                 | Over voltage protection  | Output voltage ≥14-18V, turn off the output, after the abnormality is eliminated, re-energize to recover.                       |              | Output voltage ≥29-35V, turn off the output, after the abnormality is eliminated, re-energize to recover |              |
|                                 | Over load protection   | Shut down the output when current load ≥110%~150%, auto recovers.   |              |  |              |
|                                 | Short circuit protection   | Protection type: It can be automatically restored after the fault is eliminated.  |              |  |              |
| SAFETY & EMC                    | Withstand voltage  | I/P-O/P: 3750Vac  |              |  |              |
|                                 | Isolation resistance   | I/P-O/P: 100MΩ/500VDC/25°C/70%RH  |              |  |              |
|                                 | Safety standards   | IEC/EN61347;IEC/EN60950;IP67  |              |  |              |
|                                 | EMC emission   | EN55015:2013;FCC Part 15B;EN61547:2009;EN61000-3-2:2014;EN61000-3-3:2013  |              |  |              |
|                                 | EMC immunity   | EN61000-4-2,3,4,5,6,8,11 EN61547  |              |  |              |
| Reliability and Quality Control | Impact aging   | 100% of the product is fully loaded and impacted for 4 hours under an environment of at least 40°C ± 5°C                        |              |  |              |
|                                 | Component derating   | Under the steady-state conditions of rated input and output, the stress of components will not exceed its maximum nominal value |              |  |              |
| NOTE                            | 1. All parameters not specifically mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.<br>2. Ripple and noise test method: connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure under 20MHZ bandwidth.<br>3. Ensure that the power supply is used under the rated parameters and environment. |   |              |  |              |

## Dimensions

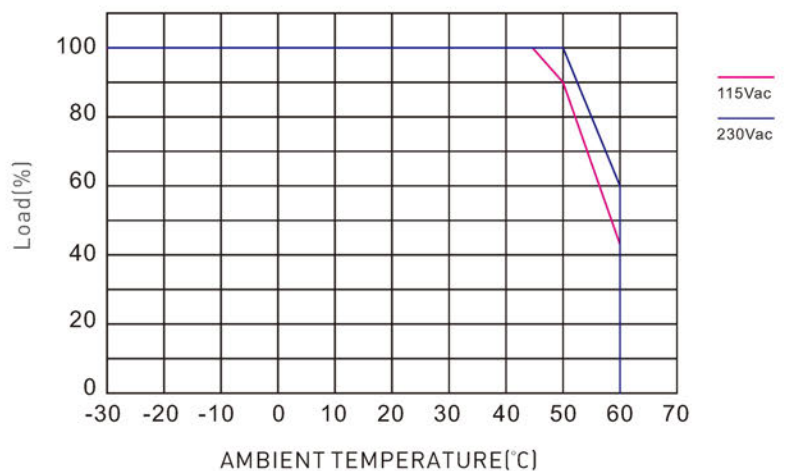
Unit:mm



## Relationship diagrams



## Temperature load curve



## Packaging Information

|                 |                      |
|-----------------|----------------------|
| DIMENSION       | 202x60x19mm(LxWxH)   |
| PACKING         | 230x70x24mm(LxWxH)   |
| CARTON QUANTITY | 45PCS                |
| CARTON SIZE     | 390x240x233mm(LxWxH) |
| WEIGHT          | 450g±10g/PCS         |

\* No further notice if any changes in the manual. Product function depends on the goods. Please feel free to contact your supplier if any question.