



# UTD-100

## 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.
- Protection: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 1/1/1/1
- Widely used in LED lighting and IT equipment.
- Compliance to worldwide safety regulation for led lightings.



100-277VAC

PF&gt;0.96

THD&lt;5%



CE CB SELV IP67



### Specification

Model	UTD-12-100	UTD-24-100	UTD-36-100	UTD-48-100	
<b>OUTPUT</b>	Output voltage	12VDC	24VDC	36VDC	48VDC
	Output voltage range	12VDC±0.2VDC	24VDC±0.4VDC	36VDC±0.7VDC	48VDC±1.2VDC
	Output current	Max 8.3A	Max 4.17A	Max 2.8A	Max 2.5A
	Output power	Max 100W			
	Output power range	0-100W			
	Ripple & Noise	≤170mV	≤250mV	≤250mV	≤250mV
	Linear Regulation	±1%			
	Load Regulation	±1%			
<b>INPUT</b>	Start-up Time (Typ)	20ms/230VAC	600ms/115VAC		
	Rise Time(Typ)	11ms/230VAC	11ms/115VAC		
	Hold Up Time(Typ)	15ms/230VAC	15ms/115VAC		
	Input voltage	100-277VAC			
	Frequency	50/60Hz			
	Input current	1.12-6.43A			
	Power factor	PF>0.96/230VAC, at full load;	PF>0.98/115VAC, at full load		
	No-load power consumption	≤0.5W			
<b>ENVIRONMENT</b>	THD	≤8% at 230VAC, at full load;	≤5% at 115VAC, at full load		
	Efficiency (Typ.)	93%	92.5%	94%	94%
	Inrush current(Typ.)	50A/230VAC			
	Control surge capability	L,N-2KV L,N-PE-4KV			
	Leakage current	Max. 0.5mA			
	Working temperature	tc: -30°C ~ 50°C; ic: 60°C			
	Working humidity	20 ~ 95%RH, condensing(Waterproof)			
	Storage temp., humidity	-40°C ~ 80°C, 10 ~ 95%RH			
<b>PROTECTION</b>	Vibration	10-500Hz, 2G 12min./1cycle, period for 70min, each along X, Y, Z axes.			
	Over temperature	Protection type: Turn off the output voltage, after the temperature drops, re-energize to restart.			
	Over voltage protection	Output voltage ±16-18%, turn off the output, after the abnormality is eliminated, re-energize to recover.		Output voltage ±29-35%, 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.			
<b>SAFETY &amp; EMC</b>	Short circuit protection	Protection type: It can be automatically restored after the fault is eliminated.			
	Withstand voltage	IP-GIP: 3750VAC			
	Isolation resistance	IP-GIP: 108MQ/500VDC/25°C/70%RH			
	Safety standards	IEC/EN/1347/IEC/EN60958/IP67			
<b>Reliability and Quality Control</b>	EMC emission	EN55015:2012/FCC Part 15B; EN1547:2008; EN1008-3-2:2014; EN1000-3-3:2013			
	EMC immunity	EN1800-4-2,3,4,5,6,8,11 EN61547			
<b>NOTE</b>	Impact testing	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			

1. All parameters not specifically mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.
2. Ripple and noise test method: connect 1µF and 10µF capacitors in parallel at the terminal, and measure under 20MHz bandwidth.
3. Ensure that the power supply is used under the rated parameters and environment.

## Dimensions

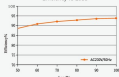
Unit:mm

AC(U/Brown)  
AC(N/Black)  
↓ (Green/Yellow)



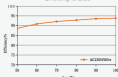
## Relationship diagrams

Efficiency vs Load



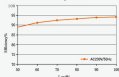
YSD-100WUD-12

Efficiency vs Load



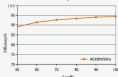
YSD-100WUD-24

Efficiency vs Load



YSD-100WUD-36

Efficiency vs Load



YSD-100WUD-48

## Packaging Information

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

Temperature load curve

