# ₩5つ 研硕达

## LED Ultra-Thin Power SupplyC&V)

- Universal AC input/full range175-277VAC)
- 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  $\rm~I~/\,II~/III.$
- Widely used in LED lighting and IT equipment
- Compliance to worldwide safety regulation for led lightings.



SELV

CB

CE

CULUS LISTED E498189

**IP67** 

 $\mathbb{M}$ 

X

€

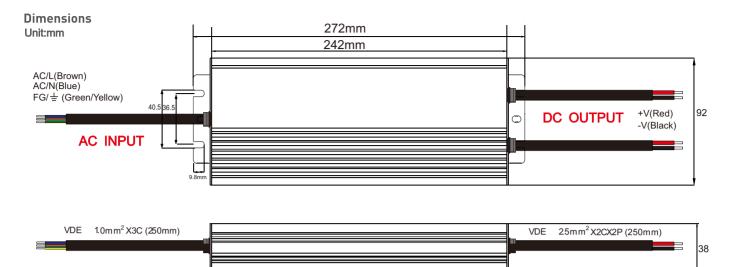
V



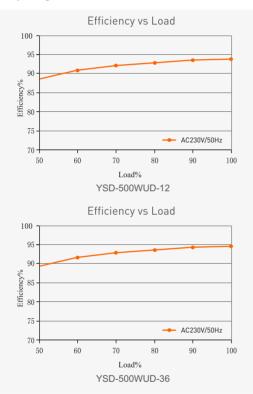
Model		YSD-500WUD-12	YSD-500WUD-24	YSD-500WUD-36	YSD-500WUD-48	
OUTPUT	Output voltage	12VDC	24VDC	36VDC	48VDC	
	Output voltage range	12VDC±0.3VDC	24VDC±0.6VDC	36VDC±0.9VDC	48VDC±1.2VDC	
	Output current	Max 41.7A	Max 21A	Max 14A	Max 10.5A	
	Output power	Max 500W				
	Output power range	0~500W				
	Ripple & Noise	≤250mV	≤250mV	≤250mV	≤250mV	
	Linear Regulation	±1%				
	Load Regulation	±1%				
	Start-up Time (Typ)	600ms/230VAC 700ms/175VAC				
	Rise Time(Typ)	50ms/230VAC 50ms/175VAC				
	Hold Up Time(Typ)	14ms/230VAC 13ms/175VAC				
INPUT	Input voltage	175-277Vac				
	Frequency	50Hz				
	Input current	228~1.53A				
	Power factor	PF>0.96/230Vac, at full load; PF>0.98/175Vac, at full load;				
	No-load power consumption					
	THD	≤12% at 230Vac,at full load	; ≤10% at 175Vac,at full loa	ad		
	Efficiency (typ.)	93%	935%	94%	94%	
	Inrush current(typ.)	65A/230VAC				
	Control surge capability	L,N:2KV L,N-PE:4KV				
	Leakage current	Max. 0.5mA				
ENVIRONMENT	Working temperature	ta: -30℃ ~ 50℃ tc: 80℃				
	Working humidity	20 ~ 99%RH, condensing(Waterproof)				
	Storage temp., humidity	-40℃ ~ 80℃, 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, Output voltage ≥29-35V, turn off the output,   after the abnormality is eliminated, re-energize to recover. after the abnormality is eliminated, re-energize to recover.				
	Over load protection	Shut down the output when current load ≥110% <sup>~</sup> 150 %, auto recovers.				
	Short circuit protection	Protection type: It can be automatically restored after the fault is eliminated.				
SAFETY & EMC	Withstand voltage	I/P-0/P: 3750Vac				
	Isolation resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH				
	Safety standards	IEC/EN61347I/EC/EN60950IP,67				
	EMC emission	EN55015:2013;FCC Part 15BEN61547:2009EN61000-3-2:2014EN61000-3-3:2013				
	EMC immunity	EN61000-4-2,3,4,5,6,8,11 EN61547				
Reliability and Quality Contro	Impact aging	100% of the product is fully loaded and impacted for 4 hours under an environment of at least $40^{\circ}C\pm5^{\circ}C$				
		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. 2.Ripple and noise test method: connect 0.1uF and 47uF 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					

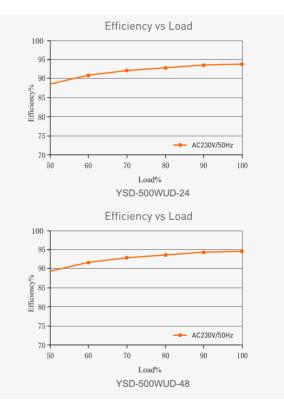
PF>0.96



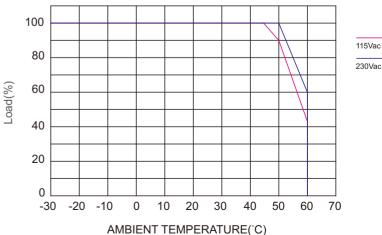


#### **Relationship diagrams**





## Temperature load curve



### Packaging Information

DIMENSION	272x92x38mm(LxWxH)	
PACKING	335x122x52mm(LxWxH)	
CARTON QUANTITY	10PCS	
CARTON SIZE	565x350x145mm(LxWxH)	
WEIGHT	2180g±10g/PCS	