

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

- Universal AC input/full range(175-277VAC)
- 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.



175-277VAC

PF>0.96

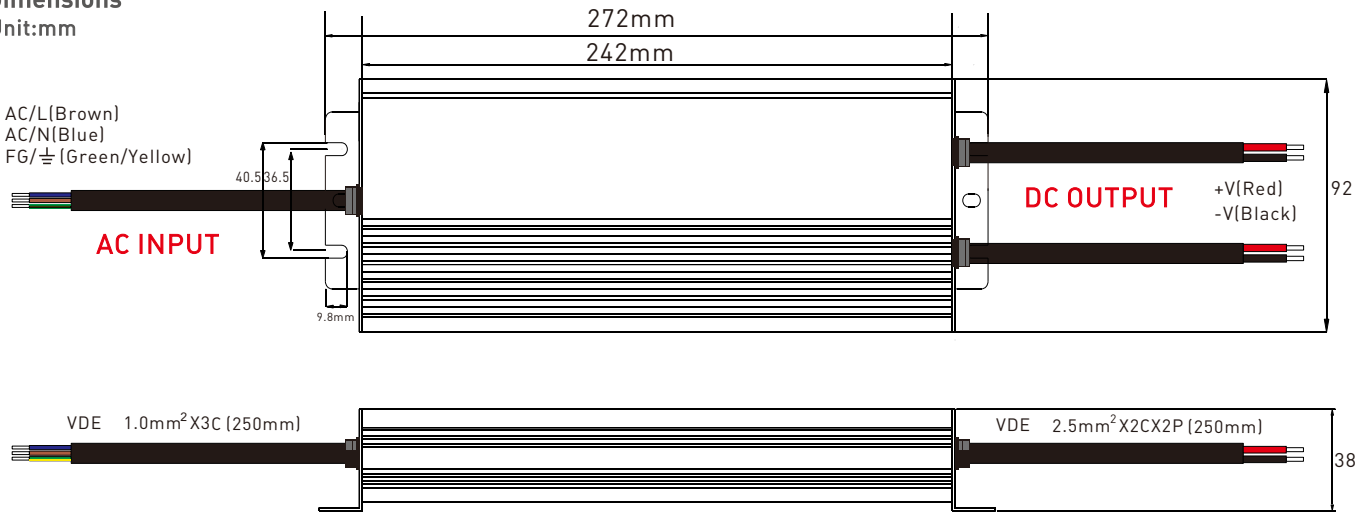
THD≤5%



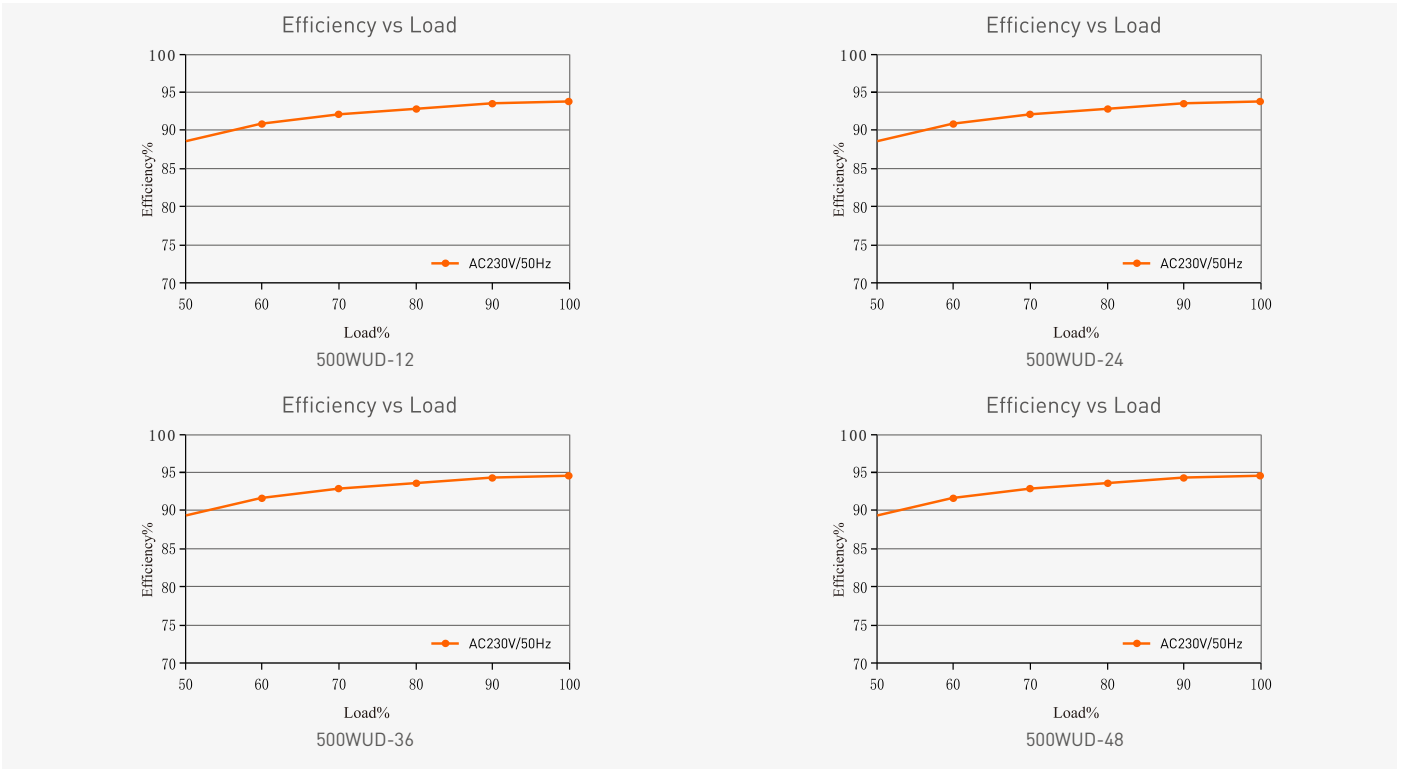
## Specification

Model	500WUD-12	500WUD-24	500WUD-36	500WUD-48	
<b>OUTPUT</b>	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				
<b>INPUT</b>	Input voltage	175-277Vac			
	Frequency	50Hz			
	Input current	2.28~1.53A			
	Power factor	PF>0.96/230Vac, at full load; PF>0.98/175Vac, at full load;			
	No-load power consumption	< 0.5W			
	THD	≤12% at 230Vac, at full load; ≤10% at 175Vac, at full load			
	Efficiency (typ.)	93%	93.5%	94%	94%
	Inrush current(typ.)	65A/230VAC			
	Control surge capability	L,N:2KV L,N-PE:4KV			
	Leakage current	Max. 0.5mA			
<b>ENVIRONMENT</b>	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.			
<b>PROTECTION</b>	Overtemperature	Protection type: Turn off the output voltage, after the temperature drops, re-energize to restore.			
	Over voltage protection	Shut down the output when output voltage load >110%~150%			
	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.			
<b>SAFETY &amp; EMC</b>	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			
<b>Reliability and Quality Control</b>	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			
<b>NOTE</b>	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				

**Dimensions**  
Unit:mm

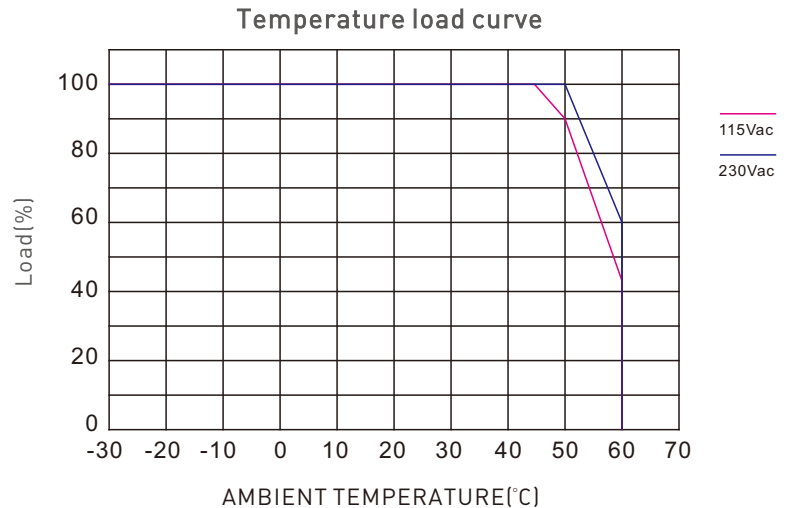


**Relationship diagrams**



**Packaging Information**

DIMENSION	272x92x38mm(LxWxH)
PACKING	335x122x52mm(LxWxH)
CARTON QUANTITY	10PCS
CARTON SIZE	565x350x145mm(LxWxH)
WEIGHT	2180g±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. <https://atomled.co.uk>