uPowerTek

TLD-800-V Series

800W, 220-480Vac Input, Constant Voltage Power Supply

Features

- Absolute Supply Voltage: 200-528Vac or 250-740Vdc
- Great Surge Immunity 10kV
- 95% Efficiency
- Low Inrush Current Option
- 100,000Hour Life @ Tc=75°C
- 8 Year Warranty @ Tc<=75°C
- UL Class P, ENEC/CB/CCC SELV Output
- Safety according to EN 61347-1, 61347-2-3' 61347-2-13, 623847

B47 Se CBCE FC IP67 FC

■ **Model List** (See appendix for more details about the operation range)

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min	Output Current Max	Certification
TLD-800-V024-XYZ	180-528Vac	800 W	24V	0	33.3A	UL/FCC/CB/ENEC
TLD-800-V036-XYZ	180-528Vac	800 W	36V	0	22.2A	UL/FCC/CB/ENEC
TLD-800-V044-XYZ	180-528Vac	800 W	44V	0	18.2A	UL/FCC/CB/ENEC
TLD-800-V048-XYZ	180-528Vac	800 W	48V	0	16.7A	UL/FCC/CB/ENEC

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Technical Data

Input Voltage	200-528Vac or 250-740Vdc		
Input Frequency	47~63Hz		
Power Factor	>0.9@60-100%load, refer to PF vs. Load curve		
THD	<15%@60-100%load, refer to THD vs. Load curve		
Input Current	3.0Amax@277Vac & Full-Load, 1.9Amax@480Vac & Full-Load		
Inrush Current	15A peak, 3.2ms duration, <0.25A2s@277Vac, Cold Start 20A peak, 3.3ms duration, <0.5A2s@480Vac, Cold Start		
Leakage Current	1mA max @277Vac 60Hz, UL8750,0.75mA max @220Vac 50Hz, IEC61347-1		
Input Under Voltage	Shut down and auto-restart		
Input Over Voltage	*Optional: Shutdown @320Vac		
Surge Protection	Line to line 6kV, line to ground 10kV, IEC 61000-4-5		
Current Accuracy	±5%lo		
Ripple Current	lp-p:5%lo max		
Setup Time	1.2s max		
Overshoot	10% lo max & LED Load		
Output Over Voltage	110% Vomax, typ.		
Short Circuit	Auto recovery. The output recovers when short is removed.		
Over Temperature	Lower the output current when Tc \geq 105±10 °C; Auto Recovery When Tc \leq 70±10 °C		
Auxiliary Power (Vaux)	12V+/-5%, 300mA max		
Operating Temperature	Case Temperature Tc=-40 $^\circ$ C $^+$ 90 $^\circ$ C $; 10\%$ RH \sim 100%RH		
Storage Temperature	-40℃~+85℃; 5%RH~100%RH		
MTBF	≥280,000 hours, 75 °C case temperature (MIL-HDBK-217F)		
Lifetime	≥100,000 hours, 75 °C case temperature, refer to life vs. Tc curve		
Case Temperature	90 $^\circ C$ max, marked in the Tc point of label		
Dimensione	9.33x4.92x1.93 by inch (body), 10.3x4.92x1.93 by inch (endcaps included)		
Dimensions	237 x 125 x 49 by mm (body), 262 x 125 x 49 by mm (endcaps included)		
Net Weight	2200g		
Packing	8pcs/Carton/20.5kg, 490x370x250mm		

Notes: Unless specified, all the test results are measured in $25\,^\circ$ C room temperature.

* marked items are optional and contact with sales people to get the functions.

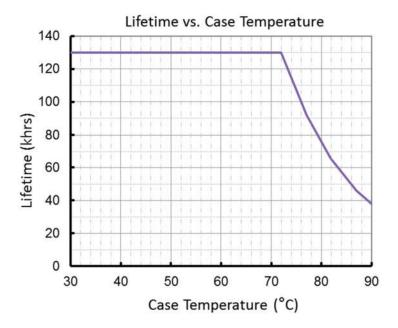


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■ Safety/EMC Compliance

Safety Standard	Description		
UL8750	Light emitting diode(LED) equipment for use in lighting products		
UL1012	Power units other than class 2		
IEC 61347-1	Lamp control gear Part 1: general and safety requirements		
IEC 61347-2-13	Lamp control gear Part 2-13: particular requirement for d.c. or a.c. supplied electronic control gear for LED modules		
EMI Standards	Description		
IEC 55015	Conducted emission test & radiated emission test		
IEC 61000-3-2	Harmonic current emissions; Class C		
IEC 61000-3-3	Voltage fluctuations & flicker		
FCC Part 15	ANSI C63.4:2009 Class B		
EMS Standards	Description		
IEC 61000-4-2	Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge		
IEC 61000-4-3	Radio frequency electromagnetic field susceptibility test (RS)		
IEC 61000-4-4	Electrical fast transient (EFT)		
IEC 61000-4-5	Surge immunity test		
IEC 61000-4-6	Conducted radio frequency disturbances test (CS)		
IEC 61000-4-8	Power frequency magnetic field test		
IEC 61000-4-11	Voltage dips		
IEC 61547	Electromagnetic immunity requirements applies to lighting equipment		

■ Lifetime vs. Case Temperature



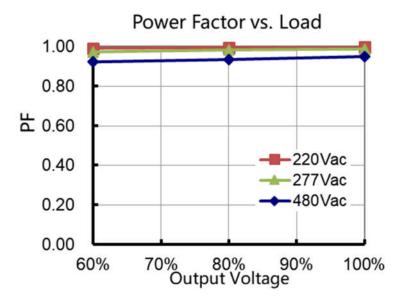
(End of Life: Maximum Failure Rate=10%)

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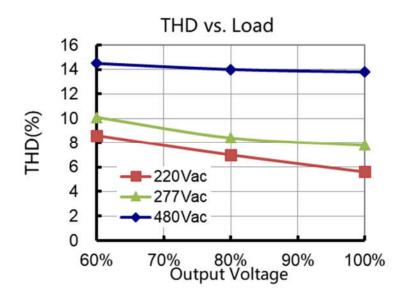


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Power Factor vs. Load



THD vs. Load



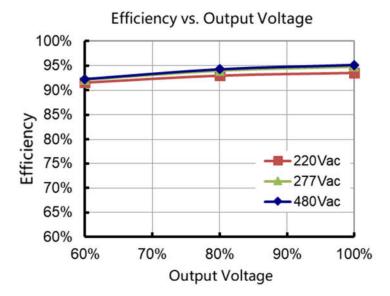
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Efficiency vs. Load



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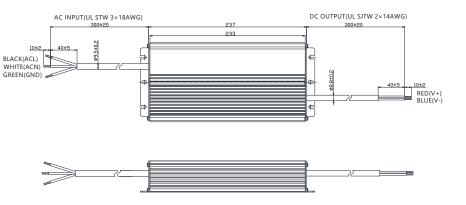


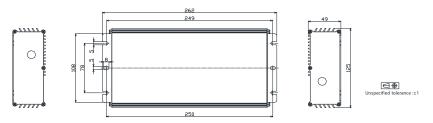
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Mechanical Design

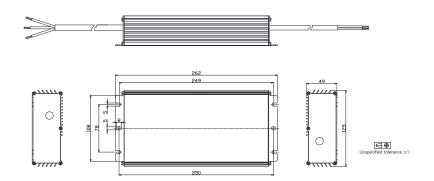
- TLD-800-Cxxx-NNU





- TLD-800-Cxxx-NNS





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