



Test & Measurement



Audio Visual



Automation



Broadcast



Industrial



Display & Signage



Renewable



ITE & Comms



Lighting



Industrial

FEATURES AND BENEFITS

4.0" (101.6 mm) body width x 9.8" (248.8 mm) length without mounting flange x 1.93" (49 mm) height

Up to 500W

Universal Input 90 to 305 VAC (Label mark: 100 - 277VAC)

Active Inrush Current Max. 20A

IP67 rating

Approved to EN60950 2nd Edition and UL8750 (recognized) & EN61347

Typical 93% Efficiency @ 230V Input, 92% @ 115V Input

Droop Current Sharing

MODEL SELECTION

Model Number	Volts	Output Current	Total Noise & Ripple	Total Regulation	OVP Threshold
LE500S24VN	24V	20.8A	1%	±4%	27.6 ± 1.0V
LE500S48VN	48V	10.4A	1%	±4%	55.5 ± 2.0V

Notes:

1. Input Connection: Type SJTW cable, minimum 300mm long
2. Measured with noise probe directly across output terminals with 0.1µF ceramic and 10µF low ESR capacitors. For main output load of less than 5%, total noise & ripple will increase to 2%

INPUT

AC Input	90-305Vac, 47-63Hz agency approved. Power supply is protected against brown out condition
Input Current	115Vac: 5A, 230Vac: 2.5A, 277Vac: 2.1A
Inrush Current	277Vac, cold start: will not exceed 20A Reference: 2.0 A ² sec typical inrush current waveform
Input Fuses	F1, F2, T10A, 500Vac, provided on all models (non-replaceable internal)
Earth Leakage Current	Earth: <700µA @ 277Vac, w60Hz, NC
Efficiency	92% typical at 115Vac, 93% typical at 230Vac Load from 50% to 100%

OUTPUT

Output Voltage	See models chart; "SELV" Rated
Output Power	Up to 500W 70°C ambient. Conduction cooled with case temperature not exceeding 90°C at 115Vac 400W with pure Convection cooling at 65°C
Turn On Time	<500 mSec @ 115Vac, 25C and above <700 mSec @ 115V, -10C
Hold-up Time	16 mSec minimum at full load & 100 Vac input
Ripple and Noise	See models chart
Total Regulation	Main Output: ±1% due to nominal line voltage 3%, due to load regulation

PROTECTION

Oversoltage Protection	Hiccup Mode, Self-recovering see chart for trip ranges
Short Circuit Protection	Self-recovering
Overtemperature Protection	Provided, self-recovering, Automatic power shutdown when internal temperature on the secondary side reaches TBD °C and on the primary size reached TBD °C
Overload Protection	Hiccup Mode, Self-recovering see models chart for trip ranges



RELIABILITY

MTBF	MTBF: 300K, 25 degree, 115V, 80% load. Based on Stress calculation and not componet count
Lifetime	50,000 Hrs at 80% load Convection cooled 115Vac See below note 50,000 Hrs at Conduction cooled with base temperature not exceeding 90°C @ 100% load and 115Vac input

Note : The E-Cap life calculations are done based on weighted temperature averages

SAFETY

Safety Standards	EN/CSA/UL/EN60950 2 nd & UL8750, EN1347
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ENVIRONMENT

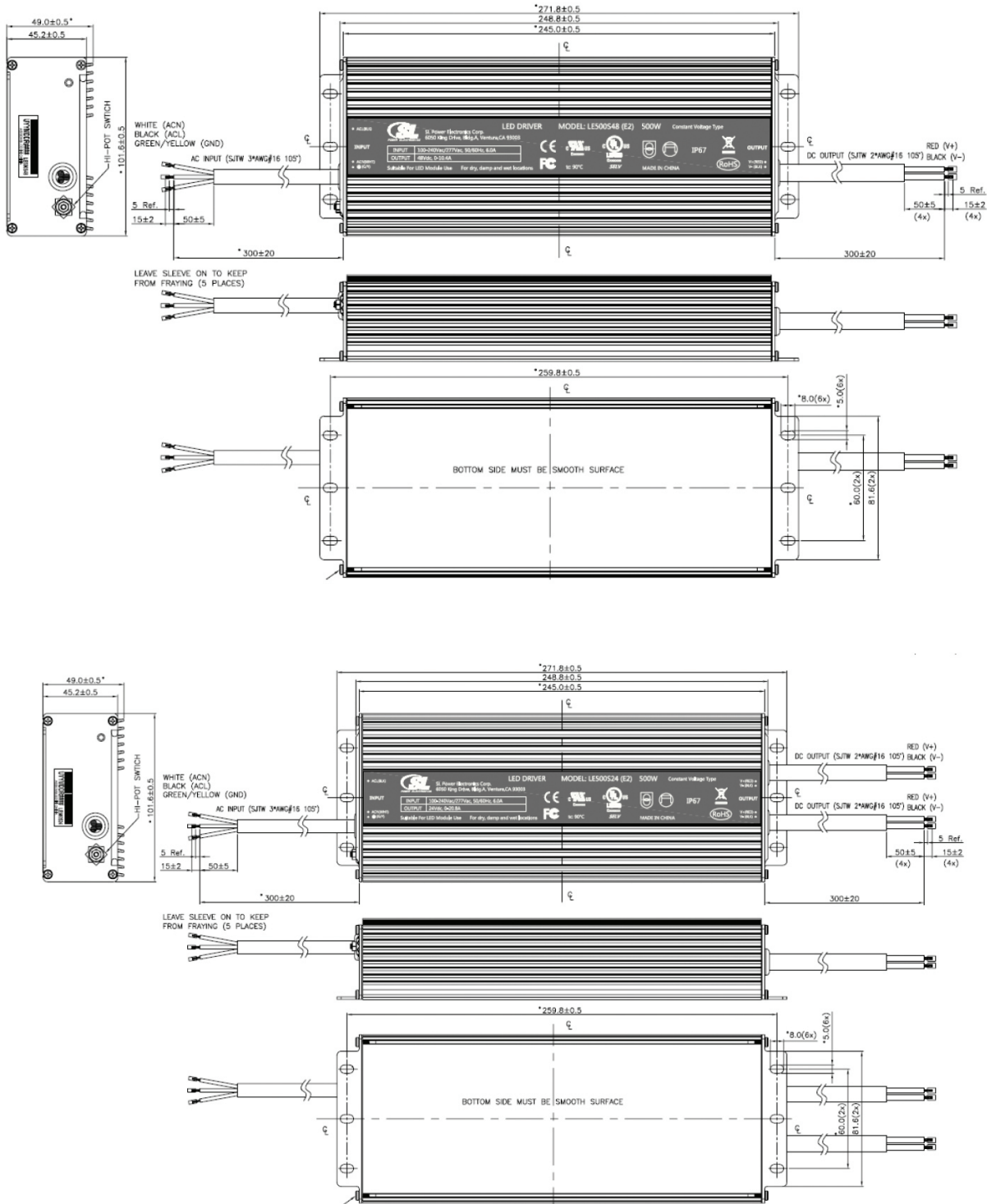
Operating Temperature	10°C to +70°C with startup at -40°C 3 minute typical warmup time required for Ripple to reduce to <1Vp-p
Relative Humidity	5% to 5%, non-ondensing
Weight	,350 grams (maximum) / 5.18 LB
Dimensions	4.0" (101.6 mm) X 9.8" (248.8 mm) X 1.93" (49 mm) Fully enclosed with IP67 rating

EMI/EMC COMPLIANCE

Emissions	EN55015 Class B, FCC Part 15, Subpart B, Class B, 3 dB margin 115Vac and 230Vac for FCC compliance only
Static Discharge Immunity	EN61000-4-2, Criteria A, 8kV Contact Discharge, 15kV air discharge
Radiated RF Immunity	EN61000-4-3, 10V/M Criteria A
EFT/Burst Immunity	EN61000-4-4, 2kV/5kHz
Line Surge Immunity	EN61000-4-5, 4kV differential, 6kV common-mode, Criteria A IEEE/ANSI C62.41.2 Category C (low) ANSI/IEEE C62.41.2 Categories A & C (low level) - Damp/Wet usesurge & transient immunity: <ul style="list-style-type: none"> - 6kV with Ohm Source Impedance, - 1.2x50uS Voltage & 8x20uS Current Combination wave; - 6kV with 12 Ohm Source Impedance, - 0.5us 100kHz ring wave
Conducted RF Immunity	EN61000-4-6, 3Vrms
Power Frequency Magnetic Field Immunity	EN61000-4-8, 3A/m
Voltage Dip Immunity	EN61000-4-11, 0%, Vin, 10mS; 40% Vin, 100mS (60% load); 70% Vin, 500mS (80% load); 0% 500ms; Criteria A, A, A, B
Line Harmonic Emissions	EN61000-3-2, Class A, C, and D (meets C from full load down to 25 Watts), 230Vac, 50 Hz. See application note
Flicker Test	EN61000-3-3, Complies



MECHANICAL DRAWING



Notes:

1. Input Connection: Type SJTW cable, minimum 300mm long, not stripped.
2. Ground stud on input side HIPOT Switch must be tightened to 6kg/cm torque PRIOR to installation and use. Failure to do so will result in shock hazard during a surge event, and will cause the PSU irreparable damage.