LE150S-VN

150W Single Output
LED Driver Series



Features

- High Efficiency (up to 93%)
- Wide Range Universal Input 90-305 VAC
- Active Power Factor Correction (0.99 typical)
- Constant Voltage Output
- Lightning Protection
- Waterproof (IP67)
- Overcurrent, Overvoltage, Overtemperature Protection
- Meets UL8750, UL935 & EN61347 Safety
- SELV
- 3 Year Warranty

Description

The LE150S-VN Series operate from a 90 ~ 305Vac input range. These units will provide up to a 150W of output power. They are designed to be highly efficient and highly reliable. The standard features include lightning protection, overvoltage protection, short circuit protection, and over temperature protection.

Model Selection

Model Number	Output Current	Output Voltage	Efficiency* 110Vac	Efficiency* 220Vac	Ripple & Noise**	Regulation Line	Regulation Load	Overvoltage Trip Level
LE150S24VN	0 – 6.25A	24Vdc	89%-90%	92%-93%	2% of Vo pk-pk	±1%	±2%	110% - 130% of Vo
LE150S48VN	0 – 3.13A	48Vdc	89%-90%	92%-93%	2% of Vo pk-pk	±1%	±2%	110% - 130% of Vo

Notes:
1. Efficiency measured at full load, at input voltage noted.
2. Measured at 20MHz bandwidth, with noise probe directly across output terminals, and load terminated with 0.1µF ceramic and 10µF low ESR electrolytic capacitors.

General Specifications

AC Input	90-305Vac, 47-63Hz, 1∅	**Turn On Time**	1.5 seconds, max.
Input Current	100Vac: 1.75A, 220Vac: 0.8A	**Hold-up Time**	20 mSec
Inrush Current	230Vac, cold start: will not exceed 65A	**Dimming Function**	N/A
Input Fuses	XA, 250VAC fuses provided on all models	**Overload Protection**	110%-180% of Io rated, Hiccup Mode

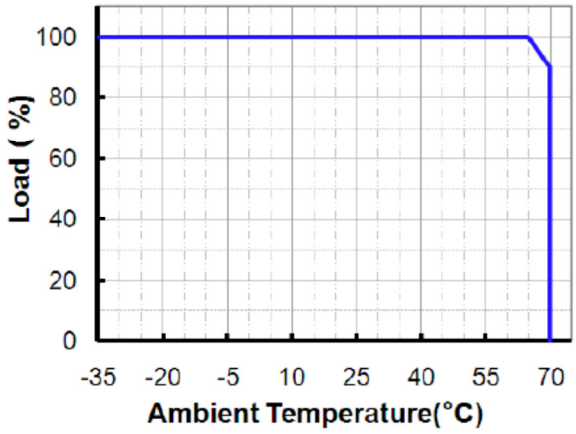
General Specifications (continued)

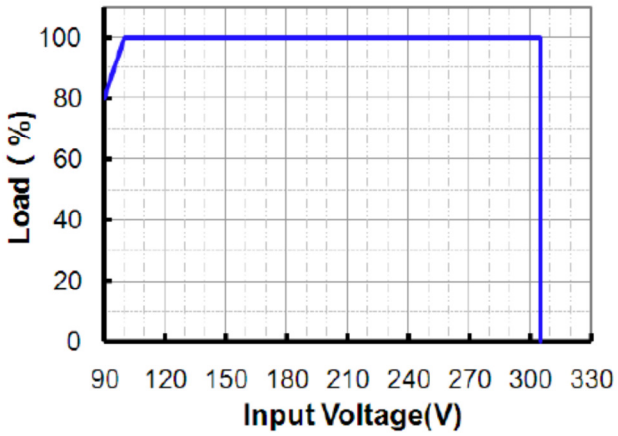
Earth Leakage Current	<1.0mA@277Vac, 50Hz	**Short Circuit Protection**	Provided - no damage to unit, self-recovery.
Efficiency	See Models chart.	**Overvoltage Protection**	Latch mode. AC input will need to be reset to return to normal operation after an OVP condition. See chart for trip range.
Output Power	150W continuous	**Overtemperature Protection**	Latch mode. AC input will need to be reset to return to normal operation after an OTP condition. Trip Temperature = 110℃ typical.
Ripple and Noise	See chart	**Operating Temperature**	Operating: -35℃ to +70℃ Non-operating: -40℃ to +85℃
Output Voltage	See chart	**Relative Humidity**	10% to 100% operating 5% to 100%, non-operating
Total Regulation	+/- 3%. See chart	**Safety Standards**	UL8750, UL935, UL1012, CSA-C22.2 No. 0, No. 107.1, & No. 250.0, EN61347-1, EN61347-2-13
Dimensions	W: 3.13” x L: 9.37” x H: 1.81”	**MTBF**	261,000 hours (110Vac input, 80% load, 25℃ ambient, per MIL-HDBK-217F).
Weight	1500g	**Lifetime**	78,000 hours (220Vac input, 80% load, 60℃ case temperature).

EMI/EMC Compliance

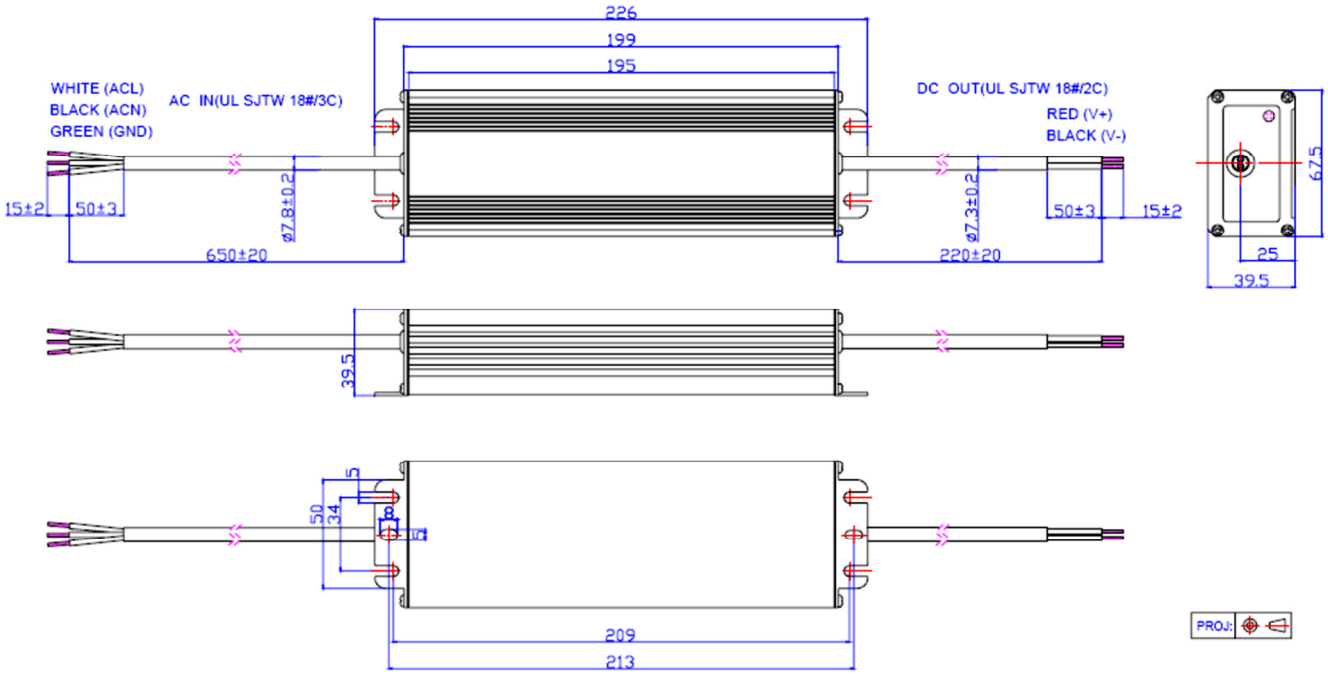
Emissions	EN55015, Radiated & Conducted
EMI for Lighting Equipment	EN61547
Static Discharge Immunity	EN61000-4-2, 4kV Contact Discharge, 8kV air discharge
Radiated RF Immunity	EN61000-4-3
EFT/Burst Immunity	EN61000-4-4
Line Surge Immunity	EN61000-4-5, 4kV line-line, 6kV line-earth
Conducted RF Immunity	EN61000-4-6
Power Frequency Magnetic Field Immunity	EN61000-4-8
Voltage Dip Immunity	EN61000-4-11
Line Harmonic Emissions	EN61000-3-2
Flicker Test	EN61000-3-3

Derating Curves





Mechanical Drawing



Data Sheet © 2012 SL Power Electronics Corp. The information and specifications contained herein are believed to be correct at the time of publication. However, SL Power accepts no responsibility for consequences arising from reproduction errors or inaccuracies. Specifications are subject to change without notice.