LXD150 SERIES

LED Power Supply Dimmable CC: 150 watts

AMTEX ELECTRONICS PTY LTD
www.amtex.com.au
"DC Power Solutions...not just components"

Features

- High Efficiency (up to 93%)
- Constant Current operation
- Dimmable
- Active PFC (typical 0.98)
- IP67 Waterproof case
- Over voltage & Overload / SC Protection
- -35ºC to 70ºC Operating Temperature
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 Compliant

Description

The LXD150 series of constant current power supplies provides up to 1400mA of output current and 428V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the 5series provides high reliability and high performance in a compact package.

Model	Output V	Output A	Input V	OVP	Eff
LXD150-0350SW	214-428V	350mA	90-305VAC	642V	93.5%
LXD150-0450SW	166-333V	450mA	90-305VAC	500V	93.0%
LXD150-0700SW	107-214V	700mA	90-305VAC	321V	93.0%
LXD150-1050SW	71-142V	1050mA	90-305VAC	213V	93.0%
LXD150-1400SW	54-107V	1400mA	90-305VAC	161V	92.5%

Input Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Input Voltage Range	Universal Input	90		305	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC in, 150W output			1.8	A
Inrush Current	230VAC in, 25°C, Cold Start			65	A
Power Factor	220VAC, 110VAC	0.96		0.99	

Output Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See table of outputs				
Output Current Range	% of Iout (without dimming)			±5	%
Ripple and Noise	20MHz Bandwidth. See Note G			3.0	% pk-pk
Turn-on Delay	Measured at 220VAC and full load		1.0	2.0	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				

General Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Isolation Voltage	Input to Output See Note A Input to Chassis	3750 1500			VAC VAC
Efficiency	See individual models		93.0		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13				
No load Power Dissipation	Measured at 230 Vac			1.0	W
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C		343,,000		Hours
Lifetime	220VAC input, 80% load, 45°C		88,000		Hours
Weight			1500		g
Operating Temperature	For 100VAC input, derate 2% per °C from 60°C to 70°C	-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

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EMC					
Parameter	**Standard**		**Level**		**Units**
Emissions					
Conducted	EN55015		Compliant		
Radiated	EN55015		Compliant		
Harmonic Distortion	EN61000-3-2		Compliant		
Flicker and Fluctuation	EN61000-3-3		Compliant		
Immunity					
ESD	EN61000-4-2		Level 4		
Radiated RFI	EN61000-4-3		Level 3		
Fast Transients - burst	EN61000-4-4		Level 4		
Surge Immunity	EN61000-4-5		Level 4		
Conducted RFI	EN61000-4-6		Compliant		
Power Freq Magnetic Field	EN61000-4-8		Compliant		
Voltage Dips	EN61000-4-11				

Dimming Control					
Parameter		**Min**	**Nom**	**Max**	**Units**
Control Voltage (1-10V input	Voltage applied on 1-10V input wire	-2		12	V
Source Current (1-10V input)	Source current on 1-10V input wire	0		1	mA

Note A. Primary to Secondary Isolation test not to be carried out on power supply.
Note B. Load Voltage must be maintained above minimum voltage. See models for voltage range.
Note C. Dimming range is 10%-100%
Note D. Dimming Signal Voltage should be above 1V for linear dimming control.
Note E. See Dimming Implementation diagrams for various dimming methods.
Note F. Do not connect GND of Dimming cable to Output..
Note G. Output connected in parallel with 0.1uF ceramic capacitor and 10uF electrolytic capacitor.

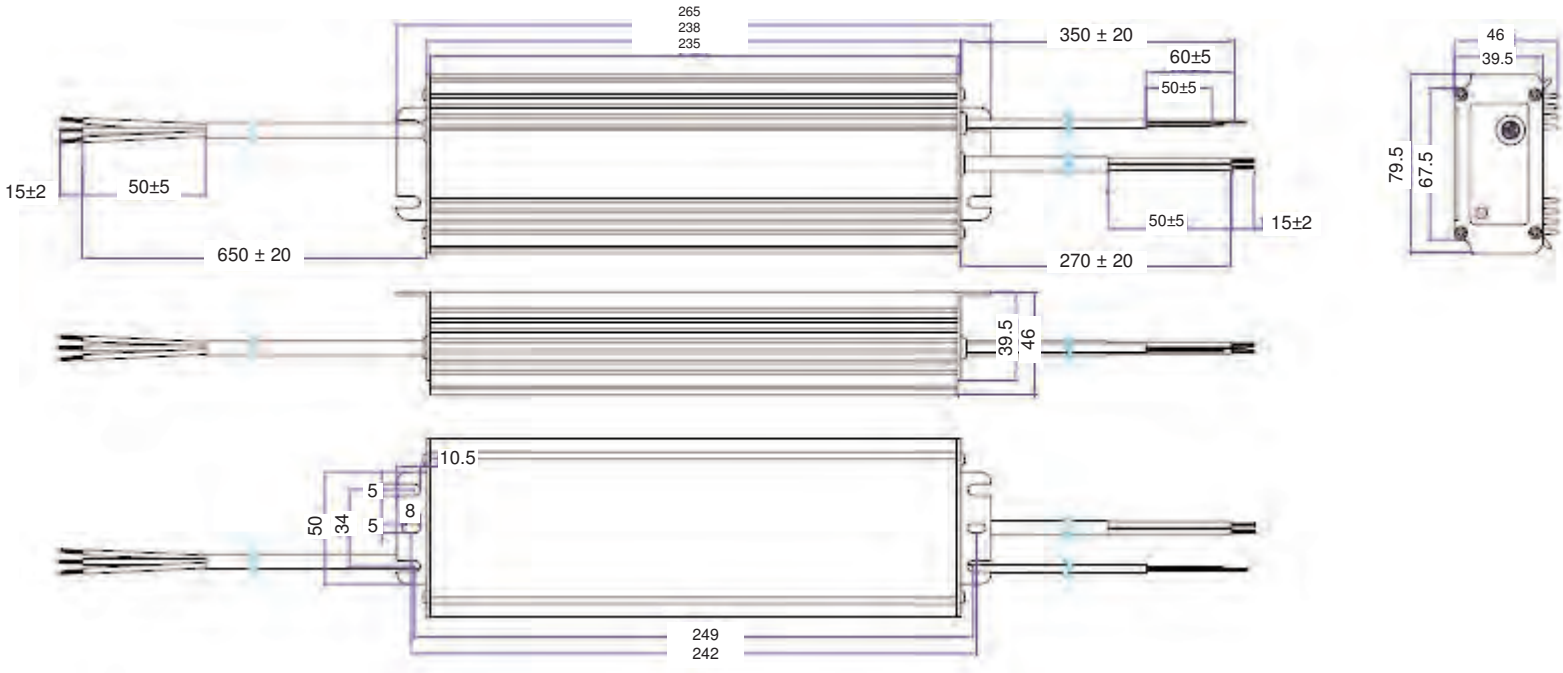
INPUT / OUTPUT WIRING

INPUT CABLE
SJTW 18AWG 3C
Black (L),White(N), Green (G)650±20mm

OUTPUT CABLE
SJTW 18AWG 2C
Black (-V) and Red (+V) 270±20mm

DIMMING CABLE
SJTW 22AWG 2C
Purple (0-10V), Grey(GND)

MECHANICAL SPECIFICATIONS



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Dimming Implementation Diagrams