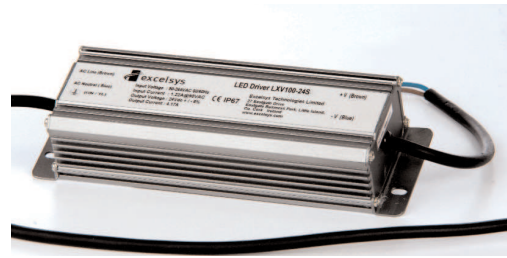


# LXD75 series

## LED Power Supply

### Dimmable LED Power Supplies



LED Power  
75W

#### LED POWER

next generation power  
source

#### FEATURES

- High Efficiency (up to 92%)
- Dimming Control
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP
- -35 to 70°C deg operation
- Universal Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXD75 series of dimmable LED power supplies from Excelsys Technologies can deliver up to 75W of output power in an extremely compact package size.

The LXD75 series of dimming LED power supplies provide up to 5000mA of output current and 214V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD75 series provides high reliability and high performance in a compact package.

Model Number	Output Voltage	Output Current	Input Voltage	OVP Latching max	Efficiency
LXD75-0350SW	107-214V	350mA	90-305VAC	250V	92.0%
LXD75-0450SW	83-166V	450mA	90-305VAC	215V	92.0%
LXD75-0700SW	54-108V	700mA	90-305VAC	130V	91.0%
LXD75-1050SW	36-72V	1050mA	90-305VAC	88V	90.0%
LXD75-1400SW <sup>(3)</sup>	27-54V	1400mA	90-305VAC	70V	90.0%
LXD75-2100SW <sup>(3)</sup>	18-36V	2100mA	90-305VAC	45V	89.0%
LXD75-2800SW <sup>(3)</sup>	13-27V	2800mA	90-305VAC	38V	89.0%
LXD75-3750SW <sup>(3)</sup>	10-20V	3750mA	90-305VAC	30V	88.0%
LXD75-5000SW <sup>(3)</sup>	7-15V	5000mA	90-305VAC	25V	88.0%

#### 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, 75W output			0.9	A
Inrush Current	230VAC in, 25°C, Cold Start			50	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	See Dimming Graphs				
Ripple and Noise	20MHz Bandwidth. See Note 1	3.0		5.0	V
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			0.6	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 2 Input to Chassis	3000 1500			VAC VAC
Efficiency	See individual models		90		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13, UL1310 Note 3				
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C		450,000		Hours
Lifetime	45°C, 110VAC Input, 80% Load		65,000		Hours
Weight			750		g
Operating Temperature		-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

Note 1. Output connected in parallel with 0.1uF ceramic capacitor and 10uF electrolytic capacitor.

Note 2. Primary to Secondary Isolation test not to be carried out on power supply.

Note 3. UL1310 Class 2 outputs for US and Canada except LXD75-1400SW which is Class 2 in US only



#### Europe/Asia

Excelsys Technologies Ltd  
27 Eastgate Drive  
Eastgate Business Park  
Little Island, Cork, Ireland  
IRELAND

t: +353 21 4354716  
f: +353 21 4354864  
e: sales@excelsys.com

#### North America

Excelsys Technologies  
519 Interstate 30, #309  
Rockwall, TX 75087  
USA

t: (972) 771 4544  
f: (972) 421 1805  
e: salesusa@excelsys.com

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

Dimming Control					
Parameter		Min	Nom	Max	Units
<b>10V Output Voltage</b>		9.8	10.0	10.2	VDC
<b>10V Output Source Current</b>		-10		10	mA
<b>Control Voltage (1-10V input)</b>	Voltage applied on 1-10V input wire	-2		12	V
<b>Source Current (1-10V input)</b>	Source current on 1-10V input wire	0		0.5	mA

- Note A. If dimming function is not required, dimming wires are to be floating  
 Note B. Primary to Secondary Isolation test not to be carried on power supply.  
 Note C. Load Voltage must be maintained above minimum voltage. See models for voltage range.  
 Note D. Dimming range is 10%-100%  
 Note E. See graphs for Dimming control. If Dimming Signal Voltage is 0-1V, output current is 10% rated current. If Dimming Signal Voltage is 8.5-10V,, output current is 100% rated current  
 Note F. See Dimming Implementation diagrams for various dimming methods.  
 Note G. Do not connect GND of Dimming cable to Output..

## INPUT / OUTPUT WIRING

### INPUT CABLE

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

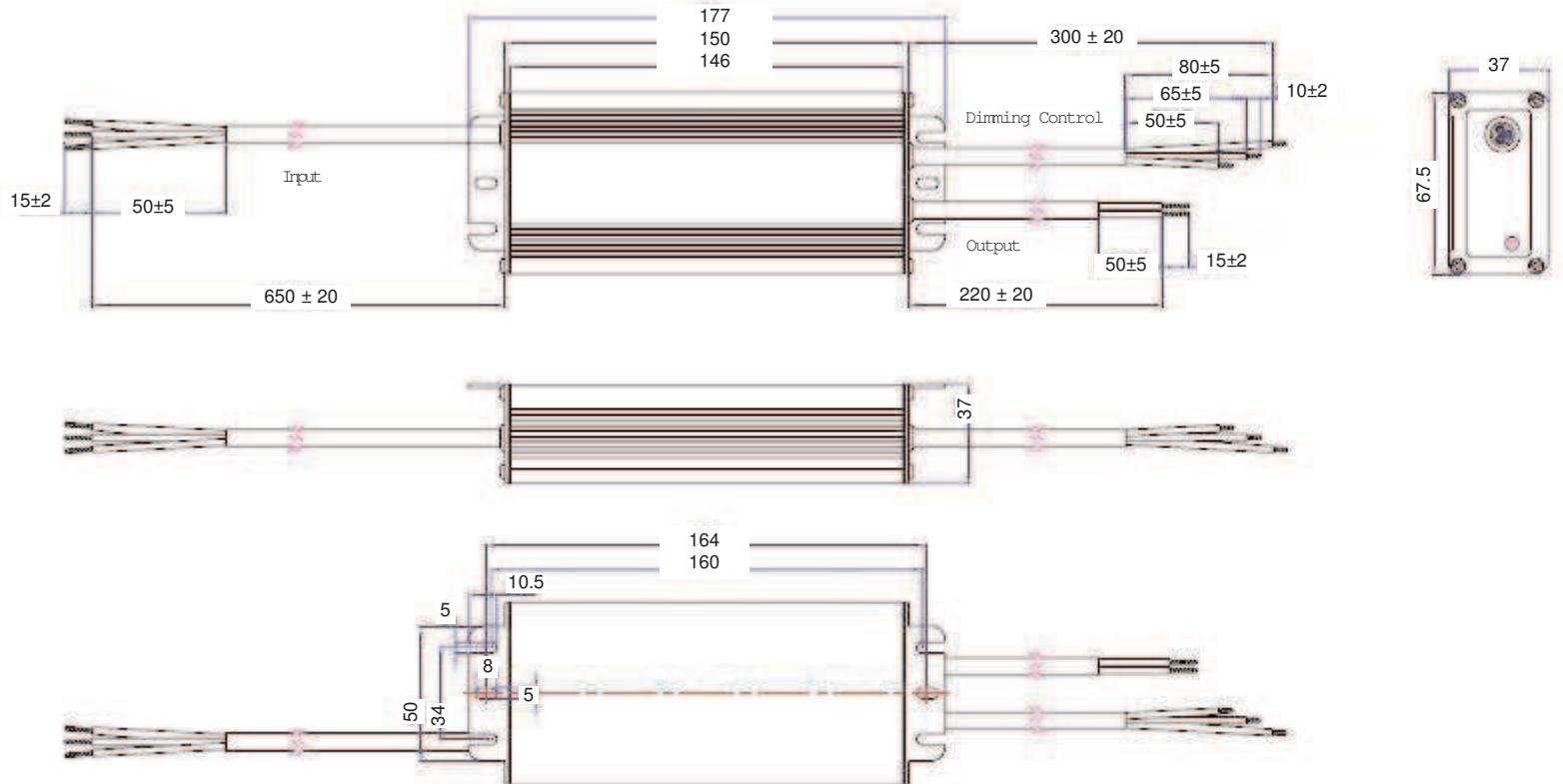
### OUTPUT CABLE

SJTW 18AWG 2C  
 Black (-V) and Red (+V) 220±20mm

### DIMMING CABLE

SJTW 22AWG 3C  
 Yellow (10V), Purple (1-10V), Green (GND)

## MECHANICAL SPECIFICATIONS



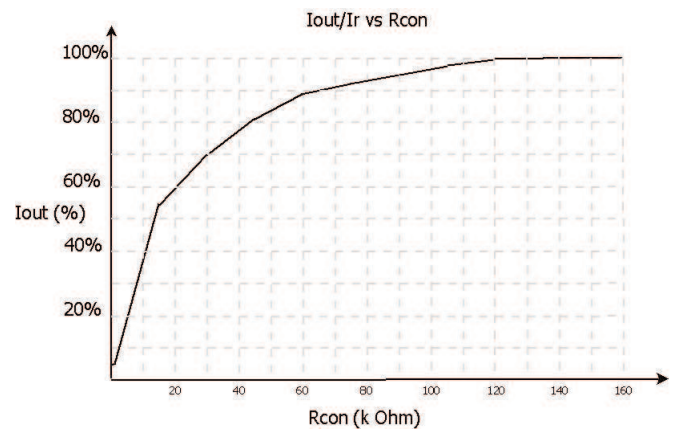
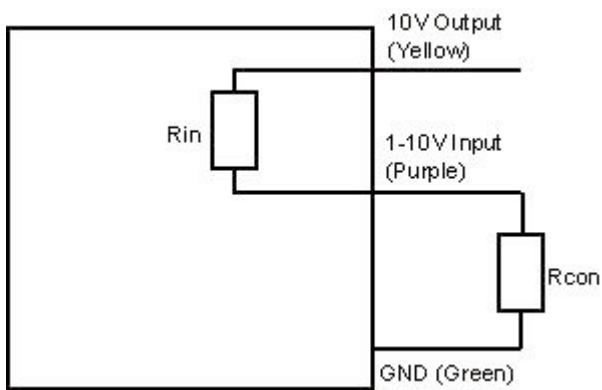
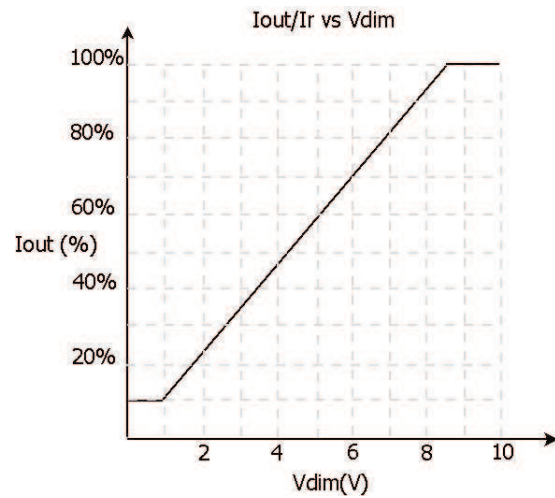
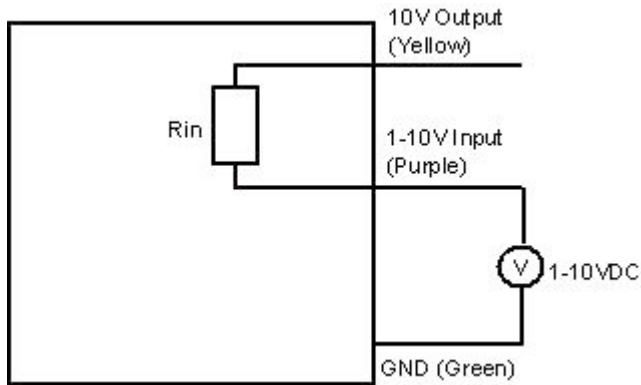
Specifications are subject to change without notice

#### Europe/Asia

Excelsys Technologies Ltd t: +353 21 4354716  
 27 Eastgate Drive f: +353 21 4354864  
 Eastgate Business Park e: sales@excelsys.com  
 Little Island, Cork, Ireland  
 IRELAND

#### North America

Excelsys Technologies t: (972) 771 4544  
 519 Interstate 30, #309 f: (972) 421 1805  
 Rockwall, TX 75087 e: salesusa@excelsys.com  
 USA

**Dimming Implementation Diagrams****LED Power  
75W**

Specifications are subject to change without notice

LXD75 Datasheet Release 8 April 2011

**Europe/Asia**

Excelsys Technologies Ltd t: +353 21 4354716  
 27 Eastgate Drive f: +353 21 4354864  
 Eastgate Business Park e: sales@excelsys.com  
 Little Island, Cork, Ireland  
 IRELAND

**North America**

Excelsys Technologies t: (972) 771 4544  
 519 Interstate 30, #309 f: (972) 421 1805  
 Rockwall, TX 75087 e: salesusa@excelsys.com  
 USA