

LXD40 series

LED Power Supply

Dimmable LED Power Supplies



LED Power
40W

LED POWER
next generation power
source

FEATURES

- High Efficiency (up to 88%)
- Dimmable Output Current
- Active PFC (Typical 0.92)
- IP66 Waterproof
- OVP, SCP
- -20 to 60°C deg operation
- Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXD40 series of dimmable LED power supplies from Excelsys Technologies can deliver up to 40W of output power in an extremely compact package size.

The LXD40 series of constant current power supplies provides up to 3330mA of output current and 114V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD40 series provides high reliability and high performance in a compact package.

The LXD40 series carries the CE mark for safety and is also RoHS compliant. For more details contact sales@excelsys.com

Model Number	Output Voltage	Output Current	Input Voltage	OVP Hiccup max	Efficiency
LXD40-0350SW	38-114V	350mA	90-305VAC	130V	88.0%
LXD40-0450SW	30-89V	450mA	90-305VAC	101V	88.0%
LXD40-0700SW ⁽³⁾	18-54V	700mA	90-305VAC	60V	87.0%
LXD40-1050SW ⁽³⁾	12-36V	1050mA	90-305VAC	42V	87.0%
LXD40-1280SW ⁽³⁾	10-29V	1280mA	90-305VAC	37V	87.0%
LXD40-1400SW ⁽³⁾	10-25V	1400mA	90-305VAC	37V	87.0%
LXD40-1660SW ⁽³⁾	8-23V	1660mA	90-305VAC	32V	86.0%
LXD40-2220SW ⁽³⁾	6-16V	2220mA	90-305VAC	25V	85.0%
LXD40-3330SW ⁽³⁾	4-11V	3330mA	90-305VAC	17V	84.0%

Input Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Input Voltage Range	Wide Input	90		305	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC in, 40W output			0.48	A
Inrush Current	230VAC in, 25°C, Cold Start			60	A
Power Factor	220VAC, 110VAC	0.92		0.98	
Output Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±2	%
Load Regulation				±5	%
Voltage Range	See table of outputs				
Output Current Range	See Dimming Graphs				
Ripple and Noise	20MHz Bandwidth. See Note 1	3		5	V
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load			2.0	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Hiccup. Auto Recovery		1.25Vmax		
General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output	3000			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models		87		%
Safety Agency Approvals	UL8750 compliant to UL1310 Class 2 EN61347-1, -2-13				
No load Power Dissipation	Measured at 120VAC and 220VAC			6.0	W
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C		487,000		Hours
Lifetime	45°C, 110VAC Input, 80% Load		77,000		Hours
Weight			300		g
Operating Temperature		-20		+60	°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 LXD40-0700SW 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
Emissions				
Conducted	EN55015		Level B	
Radiated	EN55015		Level B	
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	
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
10V Output Voltage		9.8	10.0	10.2	VDC
10V Output Source Current		-10		2	mA
Control Voltage (1-10V input)	Voltage applied on 1-10V input wire	-2		15	V
Source Current (1-10V input)	Source current on 1-10V input wire	0		1	mA

- Note A. If dimming function is not used, 10V(yellow) and 1-10V(purple)wire must be connected together.
- 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. Dimming Signal Voltage should be above 1V for linear dimming control.
- 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 2C
Black (L),White(N) 270±20mm

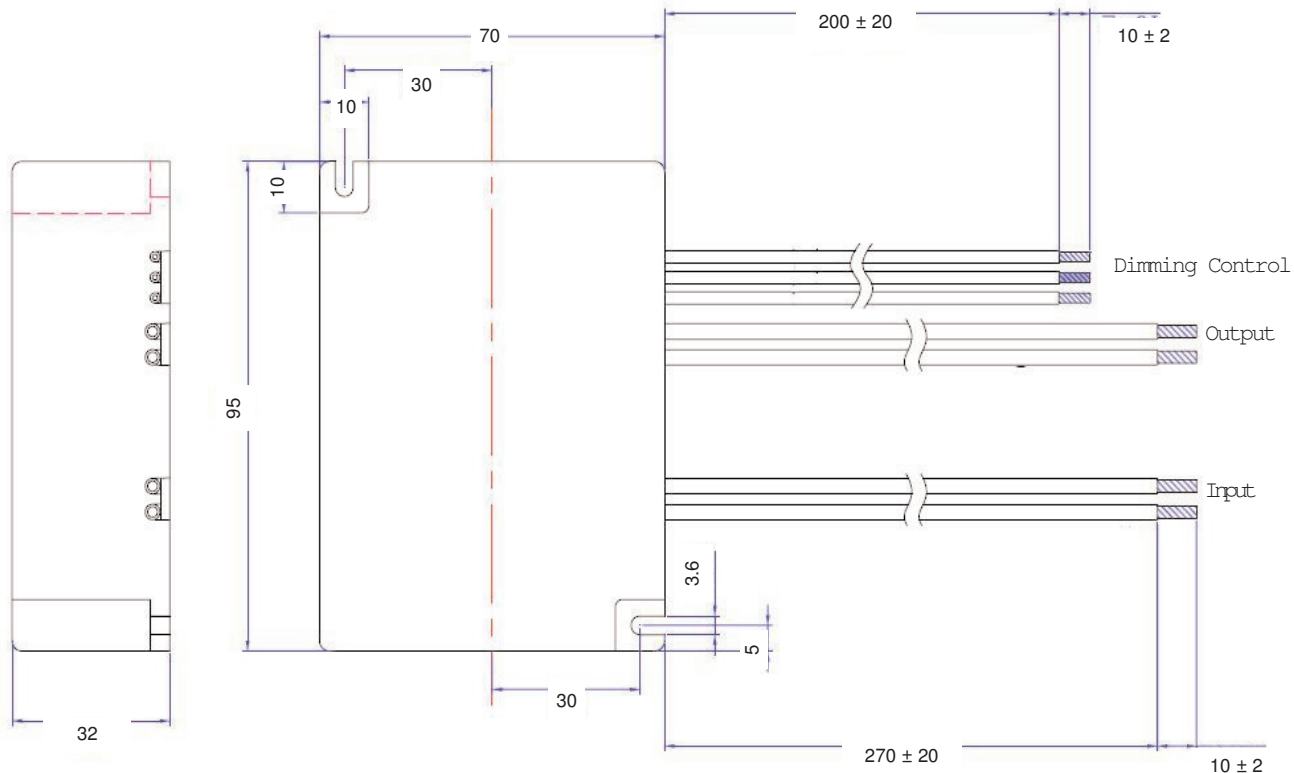
OUTPUT CABLE

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

DIMMING CABLE

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

MECHANICAL SPECIFICATIONS



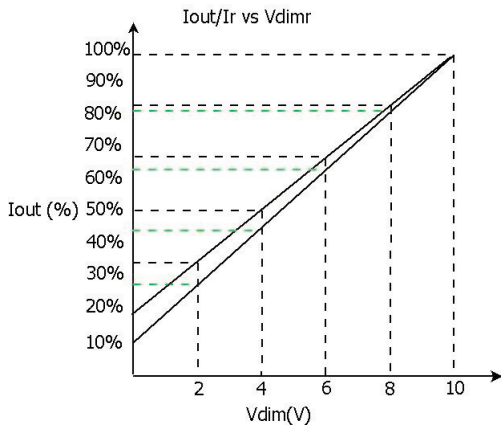
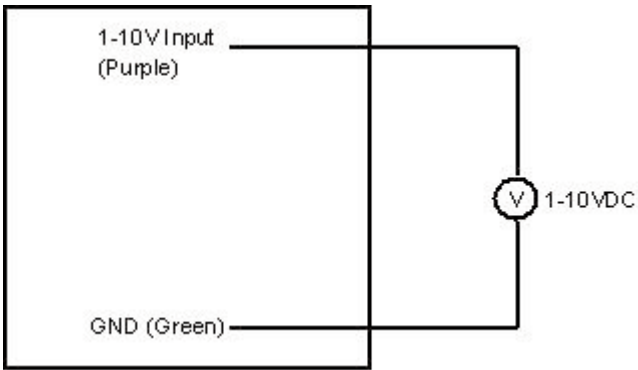
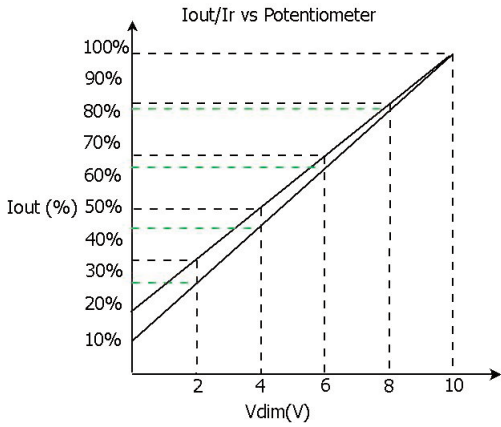
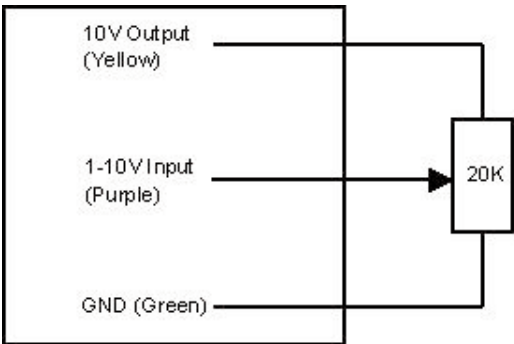
Specifications are subject to change without notice



Europe/Asia		North America	
Excelsys Technologies Ltd	t: +353 21 4354716	Excelsys Technologies	t: (972) 771 4544
27 Eastgate Drive	f: +353 21 4354864	519 Interstate 30, #309	f: (972) 421 1805
Eastgate Business Park	e: sales@excelsys.com	Rockwall, TX 75087	e: salesusa@excelsys.com
Little Island, Cork, Ireland		USA	
IRELAND			

Dimming Implementation Diagrams

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