# LXC50SW series

## **LED Power Supply**

## Constant Current Power Supplies

LED POWER
next generation power
source

#### **FEATURES**

- High Efficiency (up to 89%)
- Constant Output Current
- Active PFC (Typical 0.92)
- IP67 Waterproof
- OVP, SCP
- -35 to 55°C deg operation
- Universal Input 90-305VAC
- UL8750 recognised
- EN61347-1, -2-13 compliant

The LXC50SW series of constant current LED power supplies from Excelsys Technologies operates off 90-305VAc input voltages and delivers up to 50W of output power.

The LXC50SW series of constant current power supplies provides up to 4200mA of output current and 142V output voltages. With industry leading efficiencies, and an extensive protection feature set, the LXC50 series provides high reliability and high performance in a compact package

The LXC50 series carries the full safety approvals and is also RoHS compliant. For more details contact sales@excelsys.com

Model Number	Output Voltage	Output Current	Input Voltage	OVP Latching max	Efficiency
LXC50-0350SW	47-142V	350mA	90-305VAC	187V	89.0%
LXC50-0450SW	36-110V	450mA	90-305VAC	145V	88.0%
LXC50-0700SW	24-72V	700mA	90-305VAC	196V	87.0%
LXC50-1100SW(3)	16-48V	1100mA	90-305VAC	59V	87.0%
LXC50-1400SW(3)	12-36V	1400mA	90-305VAC	42V	87.0%
LXC50-1750SW <sup>(3)</sup>	9-29V	1750mA	90-305VAC	40V	87.0%
LXC50-2100SW(3)	8-24V	2100mA	90-305VAC	34V	86.0%
LXC50-2800SW(3)	6-18V	2800mA	90-305VAC	26V	84.0%
LXC50-3330SW <sup>(3)</sup>	5-15V	3330mA	90-305VAC	22V	84.0%
LXC50-4200SW(3)	4-12V	4200mA	90-305VAC	18V	83.0%

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, 50W output			0.7	Α
Inrush Current	230VAC in, 25°C, Cold Start			60	Α
Power Factor	220VAC, 110VAC	0.92		0.98	

Conditions/Description	Min	Nom	Max	Units
			±2	%
			±5	%
See individual models				
% of Vout			±5	%
20MHz Bandwidth. See Note 1		5		V
Measured at 220VAC and full load			3	S
Auto Recovery				
Latching. See individual models OVP levels				
	See individual models % of Vout 20MHz Bandwidth. See Note 1 Measured at 220VAC and full load Auto Recovery	See individual models % of Vout 20MHz Bandwidth. See Note 1 Measured at 220VAC and full load Auto Recovery	See individual models % of Vout 20MHz Bandwidth. See Note 1 5 Measured at 220VAC and full load Auto Recovery	±2 ±5  See individual models % of Vout ±5  20MHz Bandwidth. See Note 1  Measured at 220VAC and full load 3  Auto Recovery

General Specifications					
Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note 2	3750			VAC
	Input to Chassis	1500			VAC
Efficiency	See individual models		87		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13. UL1310. See Note 3				
No load Power Dissipation	Measured at 230 Vac			6.0	W
MTBF	MIL HDBK 217F, 110VAC input, 80% load, 25°C		487,000		Hours
Lifetime	110VAC Input, 80% load, 45°C		66,000		Hours
Weight			480		g
Operating Temperature		-35		+55	°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 on power supply.

Note 3. UL1310 Class 2 outputs for US and Canada except LXC50-1100SW which is Class 2 in US only.

Little Island, Cork, Ireland



Excelsys Technologies Ltd t: +353 21 4354716
27 Eastgate Drive f: +353 21 4354864
Eastgate Business Park e: sales@excelsys.com

North America
Excelsys Technologies
519 Interstate 30, #309
Rockwall, TX 75087

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

Standard	Level	Units
EN55015	Level B	
EN55015	Level B	
EN61000-3-2	Compliant	
EN61000-3-3	Compliant	
EN61000-4-2	Level 4	
EN61000-4-3	Level 3	
EN61000-4-4	Level 4	
EN61000-4-5	Level 4	
EN61000-4-6	Compliant	
EN61000-4-8	Compliant	
EN61000-4-11		
	EN55015 EN55015 EN61000-3-2 EN61000-3-3 EN61000-4-2 EN61000-4-3 EN61000-4-4 EN61000-4-5 EN61000-4-6 EN61000-4-8	EN55015

#### INPUT / OUTPUT WIRING

#### **INPUT CABLE**

SJTW 18AWG 2C

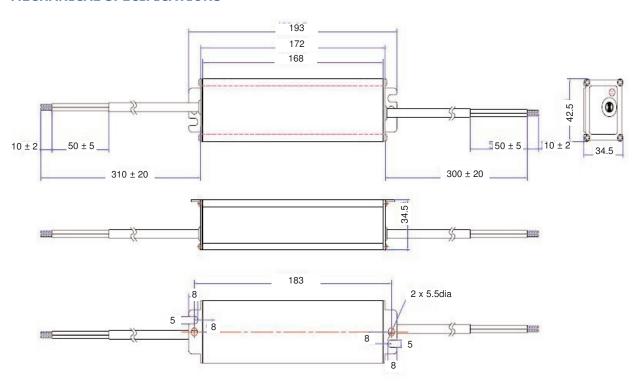
Black (L) and White(N) 340±20mm

#### **OUTPUT CABLE**

SJTW 18AWG 2C

Black (-V) and Red (+V) 340±20mm

#### **MECHANICAL SPECIFICATIONS**



Specifications are subject to change without notice LXC50 SW Datasheet 28 April 2011



#### Europe/Asia

Excelsys Technologies Ltd t: +353 21 4354716 27 Eastgate Drive f: +353 21 4354864 Eastgate Business Park Little Island, Cork, Ireland IRELAND

e: sales@excelsys.com

### North America Excelsys Technologies 519 Interstate 30, #309

**USA** 

Rockwall, TX 75087

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