# imall

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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

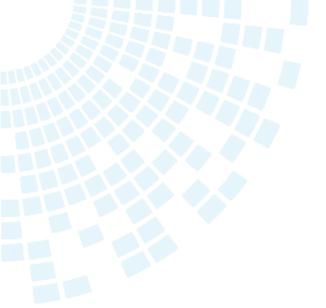
We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## LDX-SC12 12 V Super Capacitors Module

The LDX-SC12 Super Capacitors Module is used to replace 12 V batteries for short term backup applications.

Multiple parallel and series connection are possible for voltage and/or current increase.

Simple but elegant look and ease of installation make it ideal for various industrial applications.

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### **Key Features & Benefits**

- Compact size, standard enclosure shape
- Reliable topology, based on new technology of Electric Double Layer Capacitors
- > 7.6 kJ (2.1 Wh) energy storage
- Replaces 12V batteries for short term backup applications
- Extended operating temperature for high reliability
- Multiple parallel and series connection possibilities for voltage and/or current increase
- Reverse polarity and overcurrent protections
- Pluggable connectors
- Up to 85°C operating temperature





### 1. TECHNICAL SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	SPECIFICATION
Input DC Rated Voltage	Nominal: Range:	12 VDC 0 – 16 VDC
Absolute Maximum Voltage		17 VDC
Energy Storage Capacity		7.6 kJ (2.1 Wh)
Input Current for Capacitor Charging		20 A max
Charging Time	See Figure 1	
Output Current for Capacitor Discharging	30 A for 5 sec (see Figures 2, 3, 4)	20 A
Protections	Reverse polarity connection Short circuit through 30A/32V ATO blade, user replaceable Overvoltage protection	
Operating Temperature	Overtemperature protection	- 40 to + 85°C
Voltage Derating		- 120 mV / °C over 65°C
Storage Temperature		- 40 to + 80°C
Humidity	Non-condensing	5 - 95% RH
Cooling	Natural convection	
Charging / Discharging Cycles	At 25°C ambient	500 000
Life Time Expectancy	At 25°C ambient	10 years
DC Bus / Ground Isolation		0.75 kVDC
Safety Standards	UL508 (reference) EN60950 (reference)	
Emission EMC Standards Immunity	EN55022 (CISPR11) EN55011 (CISPR22) EN61000-4-2 EN61000-4-3 EN61000-4-4 EN61000-4-5	Class B Class B Level 3 Level 3 Level 3 Level 1
Protection Degree	EN60529	IP20
Vibration Sinusoidal	IEC 60068-2-6	5-17.8 Hz: ±1.6 mm; 17.8-500 Hz: 2 g 2Hours / axis (X,Y,Z)
Shock	IEC 60068-2-27	30 g 6 ms, 20 g 11 ms; 3 bumps / direction, 18 bumps total
Weight		750 g
Dimensions		80 x 120 x 110 mm
Connection Terminals	Screw type pluggable (24 - 12 AWG)	2.5 mm <sup>2</sup>
Case Material	Aluminum	

#### NOTE:

Technical parameters are typical, measured in laboratory environment at 25°C and 16 VDC.



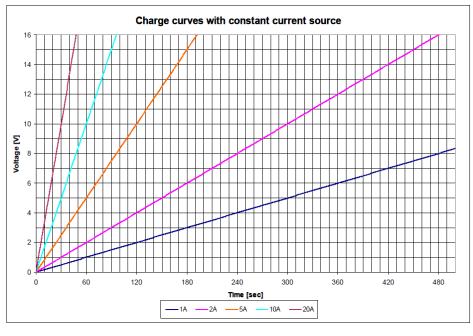


Figure	1.
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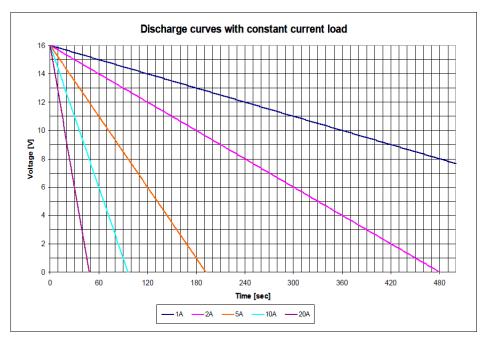


Figure 2.



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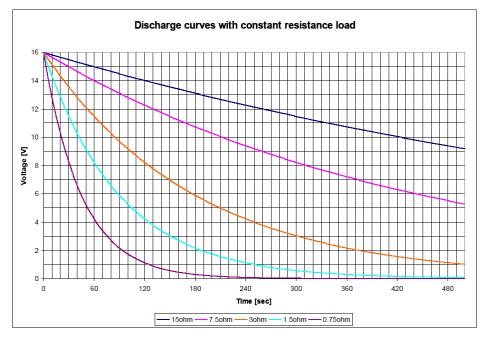


Figure 3	Ρ,
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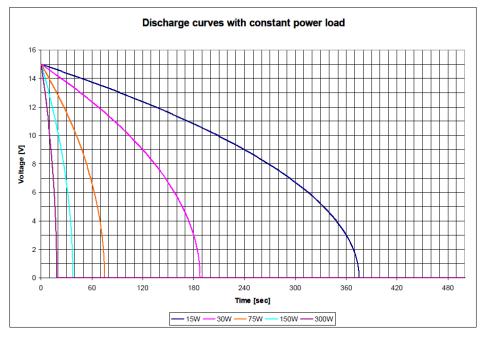


Figure 4.



### LDX-SC12

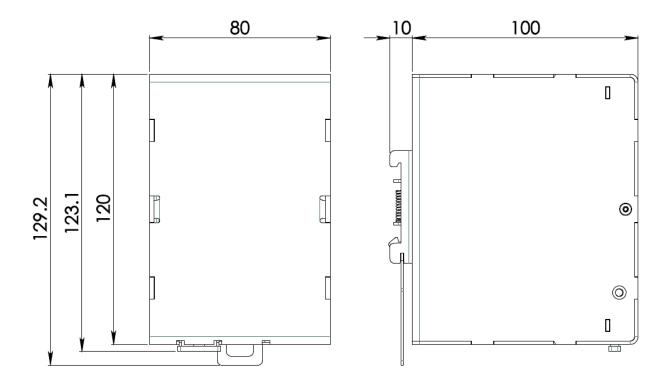


Figure 5. Mechanical Drawing

#### 2. PIN LAYOUT & DESCRIPTION





#### For more information on these products consult: tech.support@psbel.com

**NUCLEAR AND MEDICAL APPLICATIONS** - Products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.

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