

## 12 Port DC Switch

Prolojik's LX812 is an innovative application of standards-based technologies, including:

Distributed DC, DALI and Bluetooth to enable copper and energy efficiency.

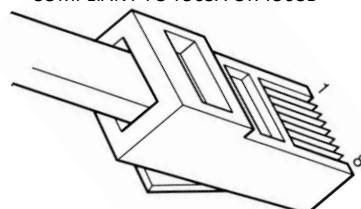
Designed to address the specific needs of commercial CAT A and fitout, education and laboratory developments.



### Key Features

- DC powered
- DALI controllable
- Bluetooth and EnOcean BLE switching
- Emergency lighting power, testing and reporting.
- No DC load control
- Constant Current or Constant drivers
- Rating up to 1000mA
- LED strings from 2V to 52V
- 94% efficiency
- Open or short circuit LED protection

RJ45 8x8 TERMINATED CABLE  
COMPLIANT TO T568A OR T568B



ENSURE THAT ALL MANUALLY  
TERMINATED CABLES ARE PRE-TESTED  
FOR COMPLIANCE TP T568A OR T568B  
PRIOR TO TERMINATION TO ACTIVE  
EQUIPMENT

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## 12 Port DC Switch Specification

### Supply

Input Supply AC:	85-264V AC
Input Supply DC:	113-370VDC
AC Frequency:	47-64Hz
Efficiency:	94%
Power factor	>0.94 at 230VAC and >0.98 at 115VAC at full load
Inrush	3.3A at 230V and 6.6A at 115V
Leakage current	<1.5mA at 240VAC.

### Output

Output DC Voltage:	45.6-50.4VDC. Nominal 48V with internal adjustment.
Output DALI PSU:	15V 250mA
Passive cooling	250W total ports 1-10 and 84W total ports 10-12
Active Cooling	400W total ports 1-10 and 120W total ports 10-12

### Power consumption

No-load	900mW
No-load with low power mode	400mW

### Active cooling

Airflow	8CFM
Acoustic Noise	27.3DbA
Power Consumption	0.7W
Life expectancy	60,000 Hours at 40°C

### Conformity & Standards

EMC Emission:	BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3,CCC GB17625.1 GB/T9254, EAC TP TC 020
EMC Immunity:	BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2, heavy industry level, EAC TP TC 020
Compliance:	Meets requirements of Energy Star and EC Code of Conduct

### Circuit Protection

Power	Output short circuit protection: automatic restarts when fault condition is removed
Thermal	Thermal shutdown with automatic recovery if internal temperature exceeds allowable
DC ports	1A internal, replaceable fuses per output.
Insulation	Prepared for Class II – reinforced insulation Input/output Isolation test voltage: 4000 VAC

### Protocol

Luminaires and sensors:	IEC62386 DALI and DALI-2 standards
Sensors:	Bluetooth LE, EnOcean BLE
Backbone:	LonWorks FT-10
Backbone-passthrough:	BACnet/MSTP

### Dimensions

Enclosure	255mm c 250mm x 47.5mm (L x W x H). 255mm x 300 mm x 47.5mm (L x W x H) including mounting points.
Fixings	2 x 9mm fixing holes (suitable for drop rod and surface mounting). 4x7mm holes for drop rod or surface mountings
Weight	2.12Kg

### Connection

Mains input:	Wieland GST18i3 Female plug (included)
Main output:	Wieland GST18i3M (not included)
DALI connector:	Blue 2 pole 5.08mm plug (not included)
LON Network:	RJ45 x 2 pins 7 and 8, plus Green 2 pole 5.08,, plug (not included)
BACnet/MSTP:	Grey 3 pole 5.08mm plug (not included)
DC outputs:	12 x FCC68 8x8 ports

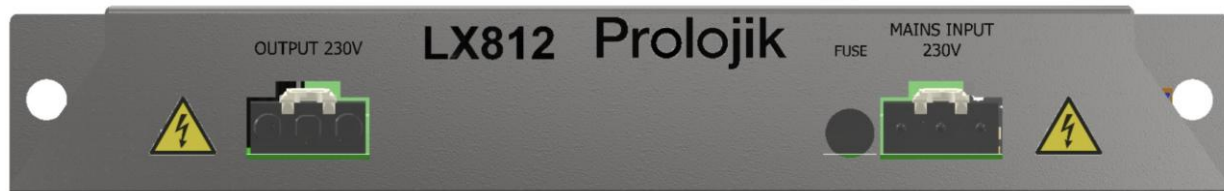
### Environment

Operating Temperature:	-10°C to +70°C
Storage Temperature:	-40°C to +85°C
Humidity:	20 to 90% non-condensing
Maximum altitude	5000m

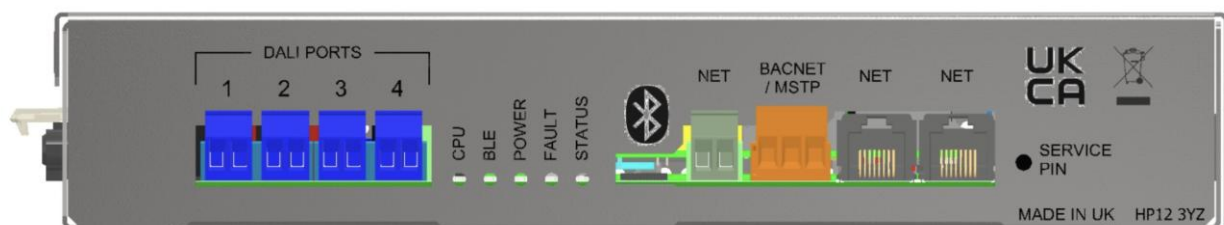
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## 12 Port DC Switch

Leave adequate space around vents to allow for air circulation.  
We recommend free air flow with 300mm in each axis.  
Obstruction will derate the device performance.



6A switched output of common voltage to supply.  
Accessible fuse for circuit protection.



DALI ports,  
max 250mA

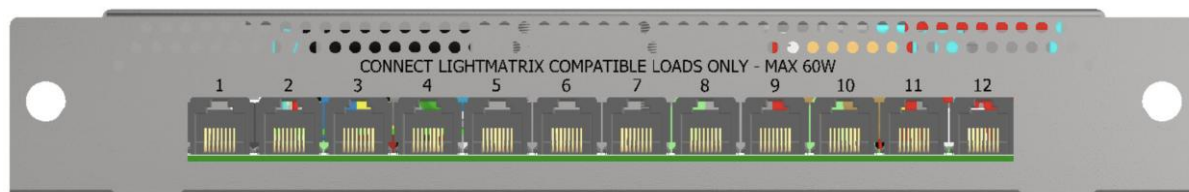
Status LEDs

Bluetooth\*

BACnet/MSTP  
Passthrough\*\*

\*Ensure distance, interference and obstructions are minimized for best Bluetooth reception.

\*\* For connection of MSTP devices to be connected and share LCM network cabling. Separate cores and protocol from LCM.



General lighting ports \* configurable zero-  
power function for enhanced energy saving

Max 400W across ports,  
subject to environment

Emergency lighting ports

Max 120W across ports,  
subject to environment

250W total ports 1-10 and 84W total ports 10-12 with passive cooling.  
400W total ports 1-10 and 120W total ports 10-12 with active cooling.

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