

Datasheet #89074521



The LDALI-PD1 module enables the control of phase-cut dimmed consumers via a DALI channel. Typical application scenarios are the integration of 230V LED-retrofit-bulbs or halogen lamps in DALI lighting applications.

The device supports a wide voltage range from 85-240 V AC 50/60Hz. The LDALI-PD1 is suitable for loads from 1VA up to 150VA. The load type (RL/RC) is automatically detected and used to select a suitable dimming-method (leading or trailing edge phase-cut). The dimming range is 3%-100%.

The integration of the module in the DALI network follows the same simple steps as the integration of a DALI lamp. The device supports the DALI-specification IEC 62386-205 (Device Type 4, "Incandescent lamp"). The LDALI-PD1 modules are directly connected to a DALI-channel and also supplied with energy by that channel. Thus in case of a system failure the intended state of the output is off.

The LDALI-PD1 is equipped with an open-circuit detection that indicates a lamp failure if no load is connected.

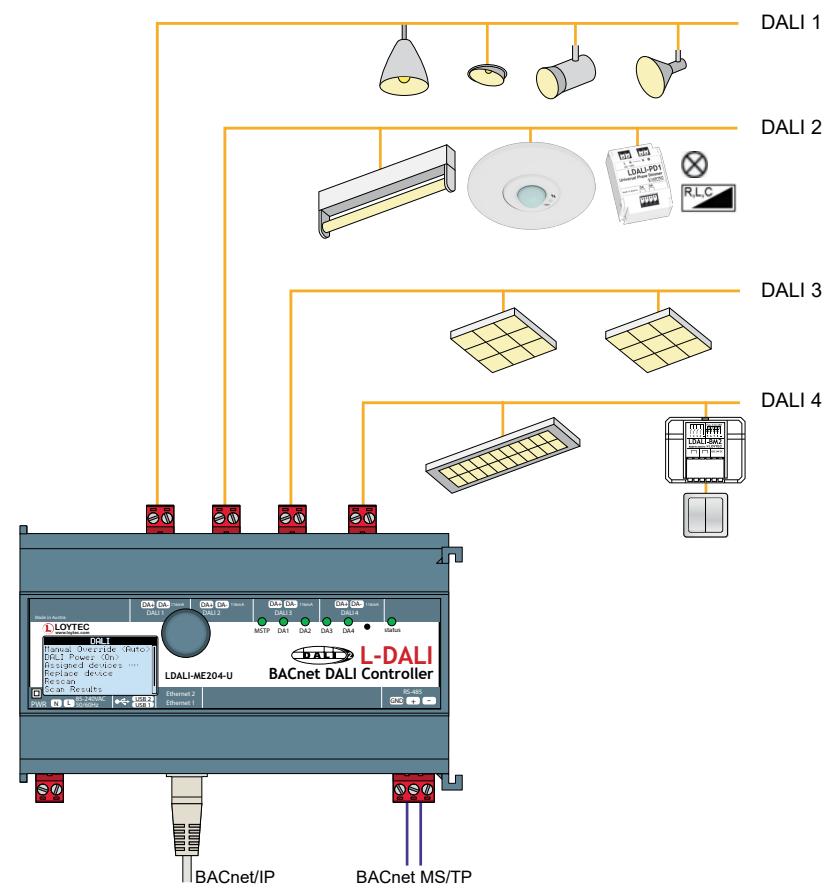
The LDALI-PD1 is designed for installation in distribution boxes or behind standard plugs in installation boxes.

## Features

- Easy integration into LOYTEC L-DALI lighting system and LROC-40x room automation controllers
- Device configuration with the free LINX Configurator or via the built-in web server of the L-DALI controller
- Dimmable built-in phase-cut dimmer
- Automatic load detection and selection of leading or trailing edge phase-cut dimming
- Suitable for phase-cut dimmed consumers like dimmable retrofit LED and CFL lamps, halogen lamps, ...
- Wide range voltage support (85-240 V AC 50/60Hz)
- Up to 64 LDALI-PD1 modules per DALI channel with sufficient dimensioned bus supply
- Supplied via DALI channel
- Electrically isolated between DALI and mains
- Open circuit detection
- DALI specification IEC 62386-102 and IEC 62386-205 supported
- Firmware update via DALI

## L-DALI Phase-Cut Dimmer Module

# LDALI-PD1



### Specifications

Type	<b>LDALI-PD1</b>
Dimensions (mm)	51 x 41 x 21 (L x W x H), DIM70
Power supply	DALI bus, typ. 3 mA at 16 V DC (10mA inrush current)
Voltage	85-240 V AC, 50/60Hz
Operating conditions	0°C – 50°C, 10 – 90% RH, non-condensing, degree of protection: IP20
Interfaces	1 x DALI, protected against overvoltage (mains)
DALI protocol conformance (IEC 62386 parts)	101 ed2, 102 ed2, 205 ed1
Terminal blocks	Push terminals
Connection wires profile	0.2 – 1.5 mm <sup>2</sup> [AWG 24 – 12]
Wire stripping length	8 mm [0.31 in]
Load range	1 VA – 150 VA (RC, RL, RLC)*
Maximum wire length to luminaire	25 m
For use with	LDALI-3E101-U, LDALI-3E102-U, LDALI-3E104-U, LDALI-ME201-U, LDALI-ME204-U, LDALI-PLC2, LDALI-PLC4, LROC-40x, LIOB-AIR20, LIOB-591

\* Note: LED/CFL lamps up to a rated power of 25W may have a power factor of 0.5 only.

### Resource limits

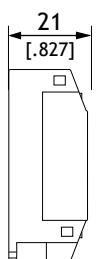
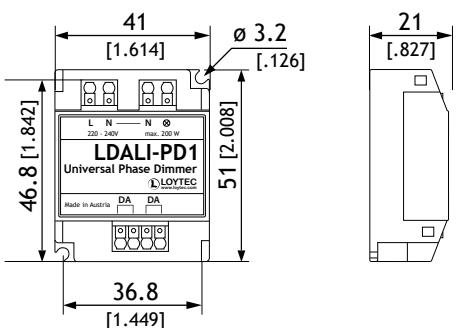
Number of LDALI-PD1	64 per DALI channel, with sufficient dimensioned DALI bus power supply
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### Order number      Product description

LDALI-PD1	DALI phase-cut dimmer module
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## Dimensions of the devices in mm and [inch]

**DIM070** LDALI-PD1



SCALE 1 :2  
10 0 20 40 60 80 100 mm