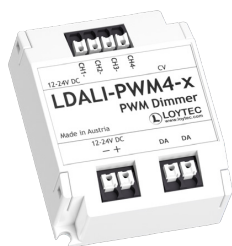


Datasheet #89075321



The LDALI-PWM4-x is a 4 channel constant voltage LED driver. It is suitable for constant voltage LED modules and LED strips with operating voltages from 12 to 24 V DC.

The module provides a wide dimming range from 0.1% to 100% and adjustable PWM frequency (125/250/500 Hz). The maximum load is limited by 3 A per channel. The module provides overtemperature protection as well as open- and short-circuit protection for each channel.

From a DALI perspective the channels can be controlled independently via separate DALI addresses. The LDALI-PWM4 module is compliant to the DALI-specifications IEC 62386-101, IEC 62386-102 and IEC 62386-207 (Device Type 6, "LED"). Separate module types for tunable white (LDALI-PWM4-TC) and colour control applications (LDALI-PWM4-RGBW) support the DALI specification IEC 62386-209 (Device Type 8, "Colour Control").

## Features

- Easy integration into LOYTEC L-DALI lighting systems 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 constant voltage DALI LED driver
- Suitable for constant voltage LED modules and LED strips
- LDALI-PWM4: 4 PWM channels, each of which can be controlled independently via separate DALI addresses
- LDALI-PWM4-TC: 4 PWM channels, 2 of which are controlled via a DALI address (DT8 - Mode Tc), perfectly suited for tunable white luminaires
- LDALI-PWM4-RGBW: 4 PWM channels, controlled via a common DALI address (DT8 - Mode RGBWAF)
- Maximum current of 3 A per channel
- Dimming range from 0.1% – 100%
- Adjustable PWM frequency: 125 / 250 (default) / 500 Hz
- Externally powered, supply voltage 12 to 24V DC according to the operating voltage of the LED modules
- High efficiency and low standby power consumption
- Overtemperature, Open- and Short-circuit protection
- DALI-2 certified, supporting IEC 62386-101, IEC 62386-102, IEC 62386-207 and IEC 62386-209
- DALI-2 certified
- Firmware update via DALI

## Specifications

Type	LDALI-PWM4-x
Dimensions (mm)	51 x 41 x 21 (L x W x H), DIM071
Power supply	12 - 24V DC +10%
Output voltage	4 x PWM, dimming range: 0.1 – 100%
Output current	3 A / channel
Output frequency	125 Hz / 250 Hz (default) / 500 Hz
Operating conditions	0°C to 50°C, 10-90% RH, non-condensing, degree of protection: IP20
Terminal blocks	Push Terminals
Connection wires profile	0.5 – 1.5 mm <sup>2</sup> [AWG 24 - 16]
Wire stripping length	8 mm [0.31 in]
PWM frequency	125 Hz / 250 Hz (default) / 500 Hz
MTBF	440000 h @ 50°C (based on MIL-217F, ground benign)
Interfaces	1 x DALI, protected against overvoltage (mains voltage), current consumption: 2 mA
Number of DALI addresses	1 (LDALI-PWM4-RGBW), 2 (LDALI-PWM4-TC) or 4 (LDALI-PWM4)
DALI protocol conformance (IEC 62386 parts)	101 ed2, 102 ed2, 207 ed1, 209 ed1
Certificates	DALI-2
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

Recommendation: For wiring keep the cable lengths between module and power supply as well as between module and LED modules/strips as short as possible (refer to the installation sheet).

## L-DALI PWM module

**LDALI-PWM4-x****Resource limits**

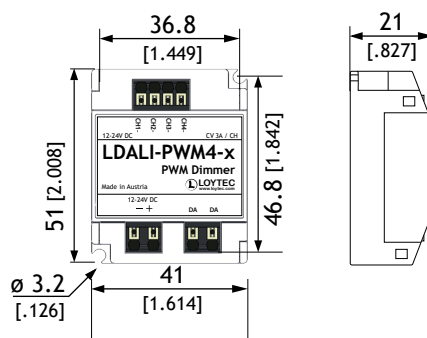
Number of LDALI-PWM4-x    LDALI-PWM4: up to 16 per channel  
    LDALI-PWM4-TC: up to 32 per channel  
    LDALI-PWM4-RGBW: up to 64 per channel

**Order number                      Product description**

LDALI-PWM4	PWM module, DALI, 4 x 3 A LED outputs, 24 V DC ext.
LDALI-PWM4-TC	PWM module tunable white, DALI, 4 x 3 A LED outputs, 24 V DC ext.
LDALI-PWM4-RGBW	PWM module RGBW, DALI, 4 x 3 A LED outputs, 24 V DC ext.

## Dimensions of the devices in mm and [inch]

**DIM071** LDALI-PWM4



The products of LOYTEC electronics GmbH are subject to constant development. Therefore, LOYTEC reserves the right to modify technical specifications at any time without prior notice. The most recent datasheet can be downloaded from [www.loytec.com](http://www.loytec.com).