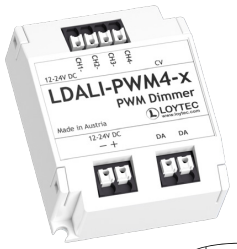
L-DALI PWM module

LDALI-PWM4-x

Datasheet #89075323



DALI-2

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 24 V 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
- Firmware update via DALI

Specifications

Type	**LDALI-PWM4-x**
Dimensions (mm)	51 x 41 x 21 (L x W x H), DIM072
Power supply	12 - 24 V DC +10%
Output voltage	4 x PWM, dimming range: 0.1 – 100%
Output current	max. 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^2 [AWG 24 - 16]
Wire stripping length	8 mm [0.31 in]
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-3E10x-U, LDALI-ME20x-U, LDALI-PLCx, LROC-40x, 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

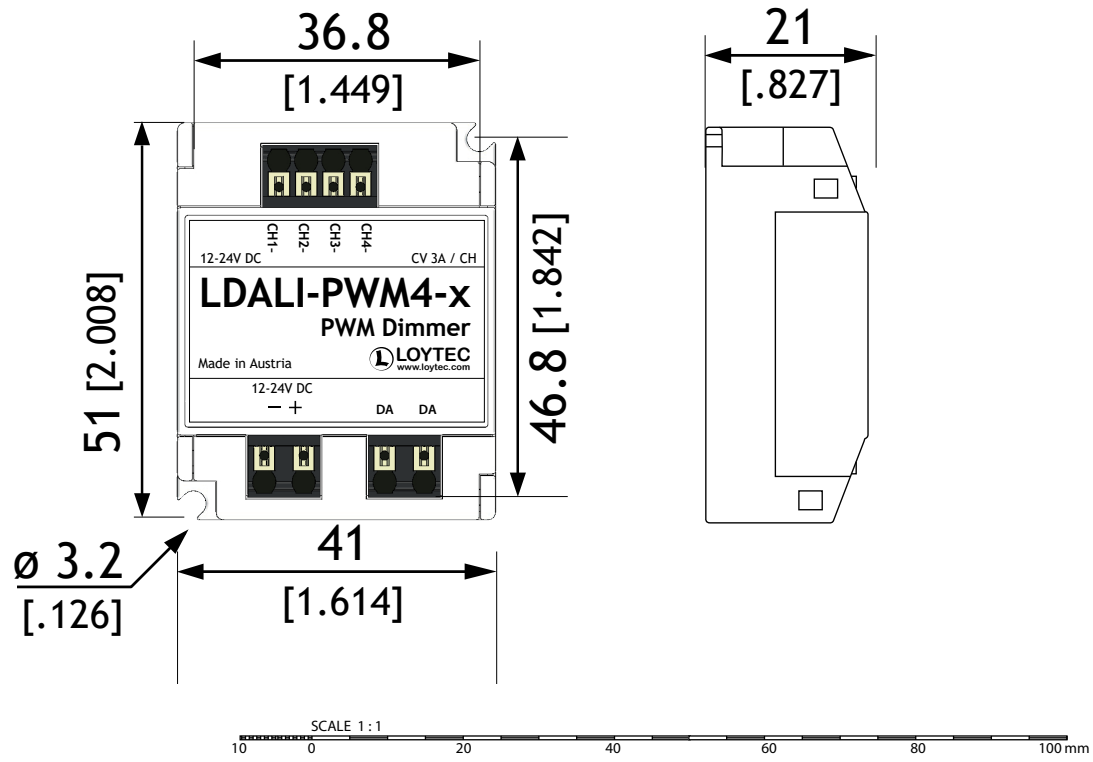
LDALI-PWM4-x

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]

DIM072 LDALI-PWM4



Products of Delta Intelligent Building Technologies (Europe) GmbH are subject to ongoing development, and technical specifications may change without notice. The most recent datasheet can be downloaded from www.loytec.com.