



wDALI RM8 0-10V PWM

Datasheet

**wDALI interface to 0-10V with
switch-on relay**

wireless expansion of a DALI-system
with 0-10V ballast

Art.Nr. 89453852 (RM8 0-10V PWM)

wDALI RM8 0-10V PWM Interface

Overview

- Wireless DALI-line expansion for ballasts with PWM control input
- The ballasts can be switched on and off by DALI-commands
- 2 components: a transmitter unit connected to the DALI-line and a receiver module with 0-10V PWM output and relay
- Integrated relay for switching ballast supply
- advantage of fail-safe digital signal data communication compared to types with analog output voltage, suitable for electronic ballast with PWM control input (e.g. Meanwell HLG, HLN, NPF or LPF series)
- transformation of DALI light level into PWM output signal from 0% to 100%
- DALI DT5: selection of linear or logarithmic dimming curve
- DALI DT5: output range selection (0-100% / 10-100% PWM)
- maximum output current of 1mA (current sink)
- the relay contact depends on the light level, at 0 the relay is opened, at any other value it is closed
- The transmitter unit is powered directly by the DALI-line, the receiver is powered by mains
- configuration via DALI-Cockpit software tool

Specification, Characteristics

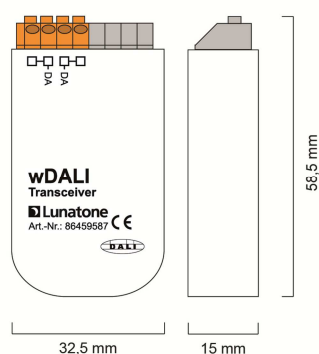
type	wDALI RM8 0-10V PWM
article number	89453852
electrical data transmitter:	
supply	via DALI-line
typ. current consumption	3.8mA
input	DALI
power on behaviour	programmable, here the Power On is the return of the DALI-line supply voltage
frequency-range	2.4 GHz
technical data transmitter:	
dimensions	59mmx33mmx15mm
housing	back box
connecting wire cross section	0.5-1.5 mm ²
storing and transportation temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +75°C
protection class	IP20

electrical data receiver:

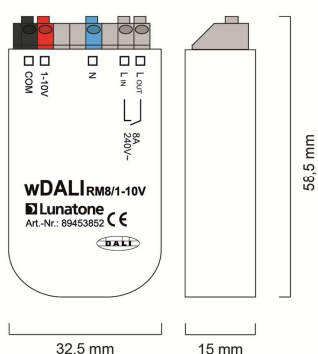
supply	210-250VAC / 50-60Hz
output	0-100% PWM (16Bit, 488Hz), current sink 1mA
nominal load	1000VA
max. switching current	8A
max. inrush current	80A
relay data	1 n/o, max. 30000 switching cycles at nominal load (resistive) max. switching frequency 1Hz
frequency range	2,4 Ghz

technical data receiver:

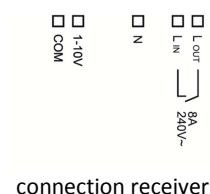
dimensions	59mm / 33 mm / 15mm
Housing	Dose
connecting wire cross section	0.5-1.5 mm ²
storing and transportation temperature	-20°C ... +75°C
operational ambient temperature	-20°C ... +60°C
protection class	IP20



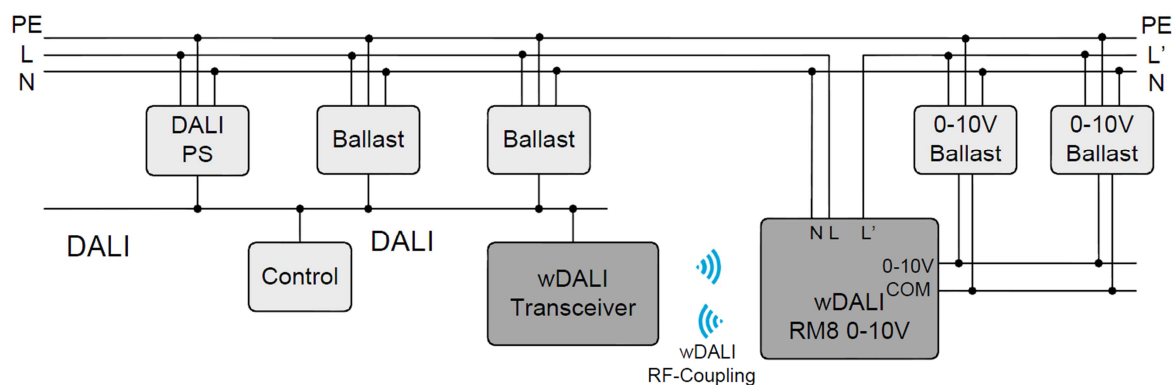
dimensions transmitter



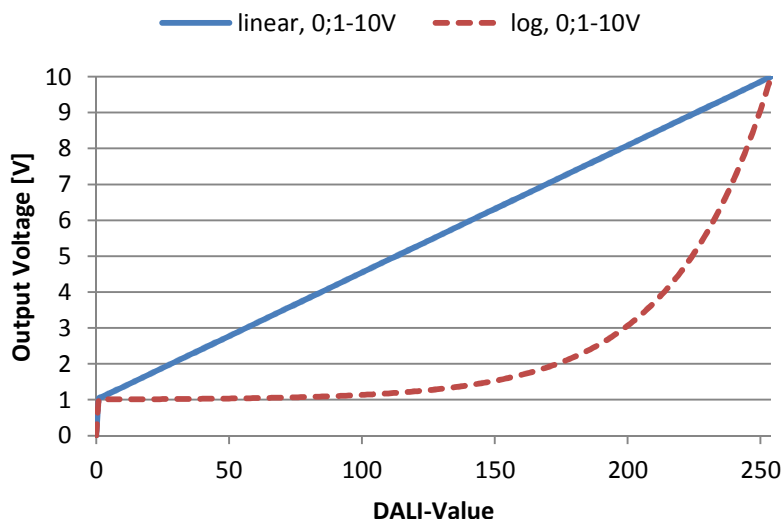
dimensions receiver



connection receiver



typical installation



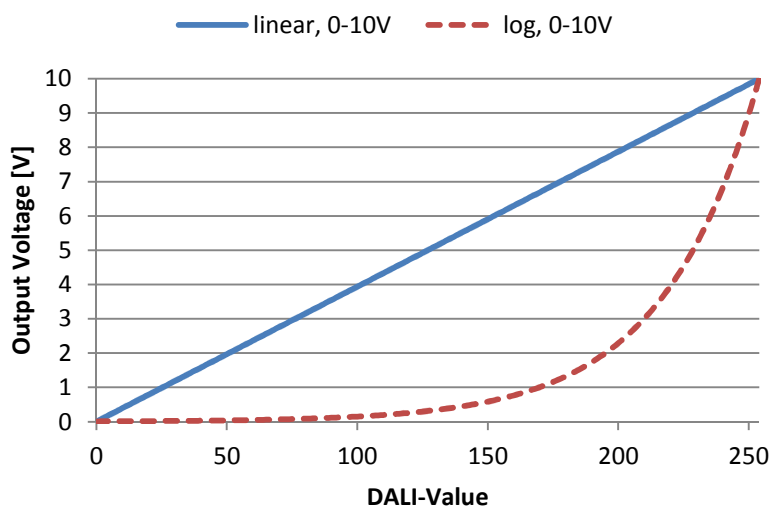
Output Voltage Range: 1-10V:

control characteristic:

DALI 0 (=OFF) correlates with a voltage below 0,5V.

DALI 1-254 is transformed to a 1-10V output voltage (10%-100% PWM pattern).

— linear
- - - logarithmisch (Werkseinstellung)



Output Voltage Range: 0-10V:

control characteristic:

DALI 0-254 is transformed into a 0-10V output voltage (0%-100% PWM pattern).

— linear
- - - logarithmisch

Note: the voltage values given in the control characteristics are valid only in the case that 10VDC are applied to the output

Installation

- the transmitter is supplied by the DALI-line (typical current consumption is 3.8mA)
- the connection to the DALI-line is polarity-free
- the DALI-input is protected against overvoltage (up to mains voltage)
- the receiver unit can switch load currents of up to 8A and is suitable for loads up to 1000VA
- The 0-10V PWM control output is suitable for sink currents up to 1mA
- at the terminals wires with cross-section from 0,5 to 1,5mm² can be connected
- the components of the wDALI RM8 0-10V are suitable for back box mounting
- receiver range depending on structural conditions (outdoors up to 300m)

Function

- Simple addressing and configuration with the DALI Cockpit software tool
- Switching on/off of to the DALI-line wirelessly connected ballasts
- DALI Device Type 5 support: linear and logarithmic control characteristic, selectable output voltage range 0-10V / 1-10V
- The relay contact is coupled to the light level. If light level is 0, relay is open, at any other value (1-254) the relay is closed
- At system failure the 0-10V output keeps the last level. After power cycling the receiver the 0-10V signal goes to the last active level.

Purchase Order Information

Art. Nr. 89453852: wDALI RM8 0-10V PWM, DALI DT5, PWM-output 1mA, relay: 1000VA/8A/80A, 1 no, back box

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems

<http://lunatone.at/en/downloads/Lunatone-DALI-Cockpit.zip>

Lunatone DALI products

<http://www.lunatone.at/en/>

Lunatone datasheets and manuals

<http://lunatone.at/en/downloads/>

Contact

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www.lunatone.com

Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.