HDL-MPD01-RF.28

1CH Wireless Dimming Actuator

buspro WIRELESS

Datasheet

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Figure 1. 1CH Wireless Dimming Actuator

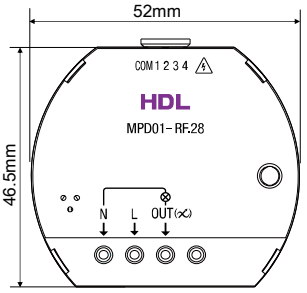


Figure 2. Dimensions - Front View

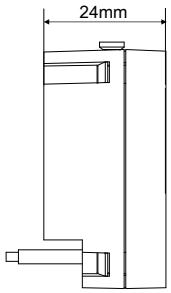


Figure 3. Dimensions - Side View

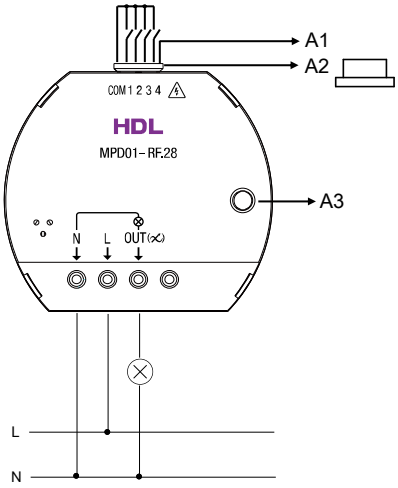


Figure 4. Wiring

Overview

1CH Wireless Dimming Actuator (See Figure 1) contains 1-channel MOSFET dimming control and 4-channel dry contact. Working with wireless gateway, the actuator can be used for controlling different targets.

Functions

- 1CH MOSFET dimming output with output current less than 1A.
- Available with 4 default dimming curves – 1.0, 1.5, 2.0 and 3.0. Users can also customize the dimming curves.
- 4CH dry contact can be used for controlling targets like dimming and switching, and supports electronic switches and mechanical switches.
- Switching modes supported by dry contact: Mechanical switch, Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, Multi-function, Parallel switch.
- Control targets: Scene, Sequence, Universal switch, Single channel lighting control, Broadcast scene, Broadcast channel, Curtain switch, GPRS control switch, Panel control, Music control.
- Compliant with IEEE.802.15.4 standard.
- Supports online upgrade.
- Supports easy programming via HDL ON APP.

Important Notes

- Do not connect the dimming output channel to inductive loads, such as transformers, fans, motors, inductive ballasts, fluorescent lamps, etc.
- The subnet ID of the actuator should be the same as that of the wireless gateway.
- To protect the actuator and loads, it is recommended to connect a 10A circuit breaker to each channel.
- The actuator should be installed in wall box and the back of the panel should be thinner than 20mm.
- Please use the actuator according to technical data.

Product Information

Dimensions - See Figure 2 -3

Wiring - See Figure 4

A1: Dry contact

A2: Silica gel stopper

A3: Programming button

Programming button: when the device works properly, the green LED flashes. Press the programming button for three times continuously, the green LED flashes quickly, then the device will enter setup mode. (The wireless gateway should be set to setup mode manually at the same time for users to configure parameters.)

Silica gel stopper: used for preventing short circuit caused by contact between power cable or load cable and dry contact. When the device is shipped from factory, the silica gel stopper is installed in the slot. Remove the stopper before wiring. Otherwise keep the stopper in the slot.

Installation - See Figure 5 - 7

Step 1. Install the wall box in the wall.

Step 2. Secure the actuator into the wall box after wiring.

Step 3. Install the panel on the wall box with screws. The back of panel should be thinner than 20mm.

Safety Precautions

- When the device is energized, the dry contact terminals are charged. Please ensure that the connected dry contact is isolated from human body.
- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- The device should be installed in wall box. HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this document.
- Please do not privately disassemble the device or change components, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.

Package Contents

HDL-MPD01-RF.28*1 / Datasheet*1 / Cable (15cm)*1

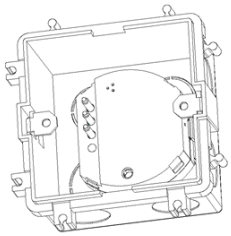


Figure 5

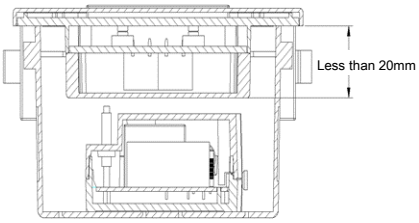


Figure 6

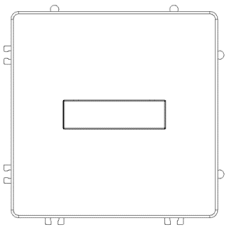


Figure 7

Figure 5 - 7. Installation

Technical Data

Basic Parameters	
Input voltage	AC100-240V(50/60Hz)
Maximum output current	1A
Power consumption	1W max.
Communication	Buspro Wireless
Wireless transmission power	+10dbm
Wireless sensitivity	-90dbm
Indoor communication distance	≤30m
RSSI (Received Signal Strength Indication)	>-80dbm
Frequency Allocation	
WPAN (China)	780 to 786MHz
SRD (Europe)	864 to 870MHz
ISM (North America)	904 to 928MHz
Default PSK	HDL-SecurityKey0
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	52x46.5x24(mm)
Net weight	36g
Housing material	PC, ABS
Installation	Wall box (See Figure 5 - 7)
Protection rating (Compliant with EN 60529)	IP20
Fire and neutral wire	1.5mm²(the module provides 15cm wire)
Load cable	1.5mm²(the module provides 15cm wire)
Stripping length	5~7mm

Name and Content of Hazardous Substances in Products

Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

The symbol “-” indicates that the hazardous substance is not contained.

The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.

The symbol “×” indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

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