

## HDL-MPR01-RF.28

### 1CH Wireless Switching Actuator

**buspro**  
WIRELESS

#### Datasheet

Issued: March 10, 2022

File Edition: V1.0.1



Figure 1. 1CH Wireless Switching Actuator

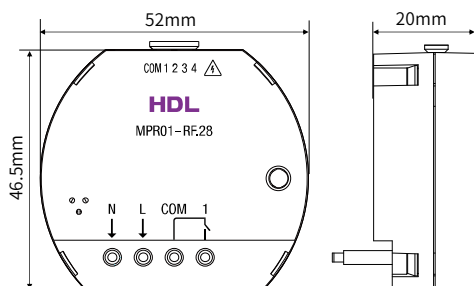


Figure 2. Dimensions - Front View Figure 3. Dimensions - Side View

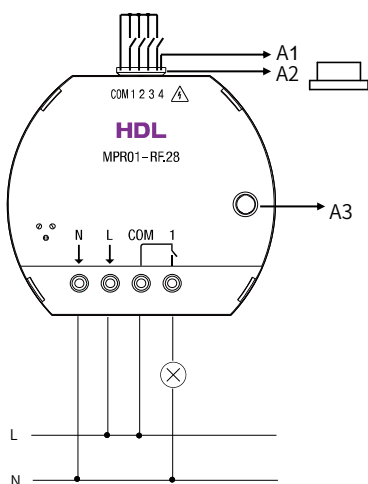


Figure 4. Wiring

## Overview

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

## Functions

- 1CH relay output and 4CH dry contact.
- Supports such functions as switch-on delay, switch-off delay and protection delay.
- 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 APP.

## Important Notes

- 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.

## 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 testing for the product must be carried out by HDL Automation Co., Ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- The device should be installed in wall box. HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this operating instruction.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Please contact our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

## Package Contents

HDL-MPR01-RF.28\*1 / Datasheet\*1 / Cable (15cm)\*1

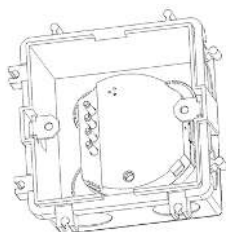


Figure 5

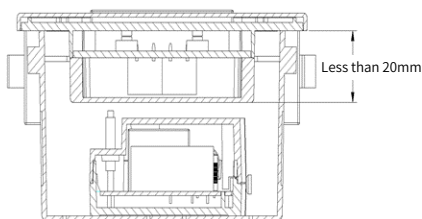


Figure 6

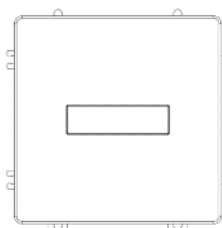


Figure 7

Figure 5 - 7. Installation

## Technical Data

### Basic Parameters

|                                            |                                                                                  |
|--------------------------------------------|----------------------------------------------------------------------------------|
| Input voltage                              | AC100~240V, 50/60Hz                                                              |
| Output current                             | 10A (Resistive load)<br>5A (Capacitive load)<br>Maximum peak inrush-current: 78A |
| Power consumption                          | 1.7W 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°C~45°C  |
| Working relative humidity | ≤90%       |
| Storage temperature       | -20°C~60°C |
| Storage relative humidity | ≤93%       |

### Specifications

|                                            |                                                    |
|--------------------------------------------|----------------------------------------------------|
| Dimensions                                 | 52x46.5x20 (mm)                                    |
| Net weight                                 | 40g                                                |
| Housing material                           | PC, ABS                                            |
| Installation                               | Wall box (See Figure 5 - 7)                        |
| Protection rating (Compliant with EN60529) | IP20                                               |
| Fire and neutral wire                      | 1.5mm <sup>2</sup> (the module provides 15cm wire) |
| Load cable                                 | 1.5mm <sup>2</sup> (the module provides 15cm wire) |
| Stripping length                           | 5~7mm                                              |

### Approved

CE

RoHS

## Installation

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.

#### Technical support

E-mail: [hdltickets@hdlautomation.com](mailto:hdltickets@hdlautomation.com)

Website: <https://www.hdlautomation.com>

©Copyright by HDL Automation Co., Ltd. All rights reserved.  
Specifications subject to change without notice.