



HDL-MRS232U.431 RS232/RS485 Gateway

#### Datasheet

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Figure 1. RS232/RS485 Gateway

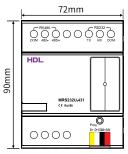


Figure 2. Dimensions - Front View

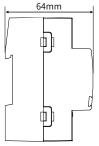


Figure 3. Dimensions - Side View

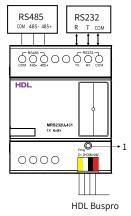


Figure 4. Wiring

### Overview

RS232/RS485 Gateway (See Figure 1) is the supporting product of the Buspro intelligent system. Its external RS485/RS232 interface adopts anti-interference technology of electrical isolation. This device enables the two-way communication between RS485/RS232 interface devices and Buspro system devices

#### **Functions**

- Enabling the mutual control between RS485/RS232 interface devices and Buspro system devices
- RS485/RS232 port ASCII or hexadecimal data -> Buspro protocol
- Buspro protocol-> RS485/RS232 port ASCII or hexadecimal data
- Input command number up to 99, ASCII code number contained in each command up to 33.
- RS485/RS232 Baud rate: 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200bps. Users can set the baud rate of standard version of RS232/RS485 Gateway.
- Online upgrade.

## **Important Notes**

- Buspro cable CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand recommended)
- Baud rates Choose matching baud rate.
- Supports RS232 and RS485 interface connections, but only one of them can be selected at one time.

## **Product Information**

#### Dimensions - See Figure 2 - 3

#### Wiring - See Figure 4

1. Programming button & indicator: The indicator flashes when the device is in working mode. Keep pushing the button for about 3 seconds to read or modify the module address in HDL Buspro Setup Tool.

# Safety Precautions



- 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 with Din rail in DB 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-MRS232U.431\*1 / Buspro connector\*1 / Label\*5 / Datasheet\*1



Figure 5



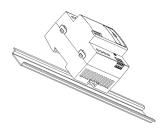


Figure 6



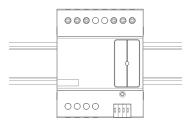


Figure 7

Figure 5 - 7. Installation

## **Technical Data**

| Technical Data                              |   |  |
|---|---|--|
| Basic Parameters                            |   |  |
| Working voltage                             | 15~30V DC   |  |
| Working current                             | 15mA/24V DC   |  |
| Communication Parameters                    |   |  |
| Baud rate                                   | 1200, 2400, 4800, 9600,14400, 19200, 38400,<br>57600, 115200bps |  |
| Data bit                                    | 8   |  |
| Stop bit                                    | 1,2   |  |
| Communication                               | HDL Buspro/RS232/RS485  |  |
| External Environment                        |   |  |
| Working temperature                         | -5°C~45°C   |  |
| Working relative humidity                   | ≪90%  |  |
| Storage temperature                         | -20°C~60°C  |  |
| Storage relative humidity                   | ≤93%  |  |
| Specifications                              |   |  |
| Dimensions                                  | 72mm×90mm×64mm  |  |
| Net weight                                  | 310g  |  |
| Housing material                            | Nylon, PC   |  |
| Installation                                | 35mm DIN rail installation (See Figure 5 - 7)                   |  |
| Protection rating (Compliant with EN 60529) | IP20  |  |
| Approved                                    |   |  |
| CE  |   |  |
|   |   |  |

# **HDL Buspro Cable Guide**

| HDL Buspro | HDL Buspro Cable | CAT5/CAT5E               |
|------------|------------------|--------------------------|
| DATA+      | Yellow           | Blue/Green               |
| DATA-      | White            | Blue white/Green white   |
| COM        | Black            | Brown white/Orange white |
| 24V DC     | Red              | Brown/Orange             |

# Installation

RoHS

## Installation - See Figure 5 - 7

- Step 1. Fix the DIN rail with screws.
- Step 2. Buckle the bottom cap of the RS232/RS485 Gateway on the edge of the DIN rail.
- $Step \ 3. \ Press \ the \ device \ on \ the \ DIN \ rail, slide \ it \ and \ fix \ it \ up \ until \ an \ appropriate \ position \ is \ adjusted.$

## Technical support

E-mail: hdltickets@hdlautomation.com Website: https://www.hdlautomation.com

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