HDL-M485/GW.40

Buspro-RS485 Interface Mini

Datasheet

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Overview

Buspro-RS485 Interface Mini (See Figure 1-2) enables the bidirectional communication between the RS485 interface device and the Buspro device. And its small size has the advantage of increasing space utilization.

Its functions include:

- It is installed in the electric box by the base + module combination method, which occupies about 1.5P of the distribution box
- Supports mutual transfer between RS485 and Buspro protocol
- With a RS485 interface
- Conversion modes: string, hexadecimal, and data mode
- Supports a variety of baud rates, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
- Up to 200 control targets supported
- The user can customize the instruction identifier
- HDL Buspro communication supported
- Online update/manual update supported



Figure 1. Buspro-RS485 Interface Mini



Figure 2. Base

Components and Operation

Dimensions of Buspro-RS485 Interface Mini - See Figure 3 - 4

Dimensions of Base - See Figure 5 - 6

Wiring - See Figure 7

1. Programming button & indicator: The green indicator will flash when the device is working properly. Keep pressing the button for 3s, the green indicator stops flashing, and the red indicator keeps on, then the subnet ID and device ID can be read and modified via HDL Buspro Setup Tool.
2. RS485 connector
3. HDL Buspro interface

Installation

The device can be installed in wall box or on DIN rail.

Wall box installation - See Figure 8

Step 1. Install the wall box in the wall.

Step 2. Secure the Buspro-RS485 Interface Mini into the wall box.

Step 3. Install the panel on the wall box with screws.

DIN rail installation - See Figure 9

Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of the base on the edge of the DIN rail.

Step 3. Press the base on the DIN rail, slide it and fix it up until an appropriate position is adjusted.

Step 4. Install the Buspro-RS485 Interface Mini in the base.

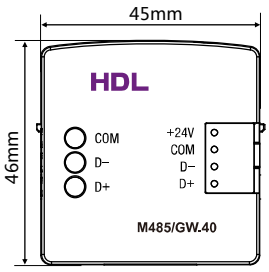


Figure 3. Dimensions - Front View

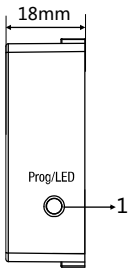


Figure 4. Dimensions - Side View

Buspro-RS485 Interface Mini

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable.
- Buspro connection - Series connection (hand-in-hand recommended)
- Check connections - Re-tighten all connections after installation.

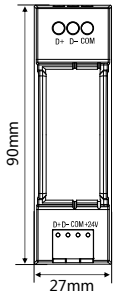


Figure 5. Base - Front View

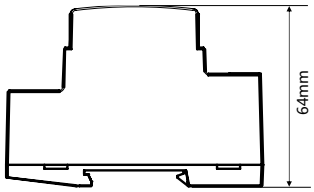


Figure 6. Base - Side View

Safety Precautions

- 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 with DIN rail in DB 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.
- It is not allowed to exceed the range.

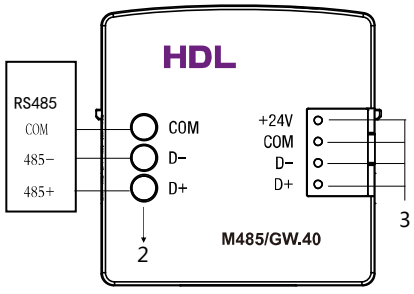


Figure 7. Wiring

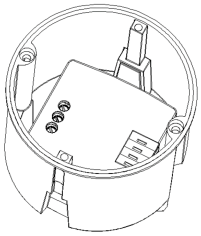
Package Contents

HDL-M485/GW.40 (Buspro-RS485 Interface Mini and base)*1 / Buspro connector*1 / Silica gel stopper*1 / Datasheet*1

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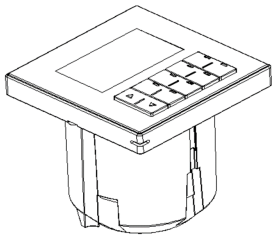
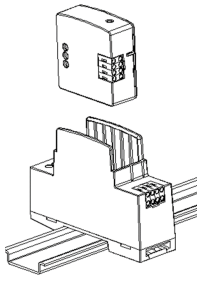


Figure 8. Wall box installation





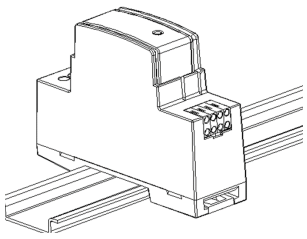


Figure 9. DIN rail installation

Technical Data

Basic Parameters

Working voltage	18~36V DC
Working current	12mA/24V DC
Baud rate	1200, 2400, 4800, 9600,14400, 19200, 38400, 57600, 115200bps
Data bit	8
Stop bit	1, 2
Communication	HDL Buspro/RS485

External Environment

Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%

Specifications

Dimensions	Buspro-RS485 Interface Mini: 45mm×46mm×18mm Base: 90mm×64mm×27mm
Net weight	Buspro-RS485 Interface Mini: 25g Base: 45g
Housing material	Buspro-RS485 Interface Mini: Flame retardant PC+ABS Base: Flame retardant PA66
Installation	Wall box installation (See Figure 8) 35mm DIN rail installation (See Figure 9)
Protection rating (Compliant with EN 60529)	IP20

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.

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