HDL®

M/RS485MNI.1

KNX-RS485 Interface Mini

Hardware Version: A

KNX®

Datasheet

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Figure 1. KNX-RS485 Interface Mini

Figure 2. Base

45mm

46mm

Figure 3. Dimensions - Front View

18mm

Prog/LED — 1

Figure 4. Dimensions - Side View

KNX-RS485 Interface Mini

90mm

27mm

64mm

Figure 5. Base - Front View

Figure 6. Base - Side View

RS485

COM — COM
485− — 485−
485+ — 485+

3

2

M/RS485MNI.1

Figure 7. Wiring

Overview

KNX-RS485 Interface Mini (See Figure 1-2) is a small module that used for bidirectional data exchange between KNX and RS485. Accordingly, the module has two interfaces, RS485 and KNX. Its small size makes it easy to install and greatly increases space utilization.

Its main features include:

■ 3 working modes: String mode, Hexadecimal mode, Data mode

■ Baud rates: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps. Users can choose baud rates according to their requirements.

■ Gateway between KNX and RS485: RS485 (string mode or hexadecimal mode, data mode) <-> KNX/EIB.

■ Supports up to 200 control targets

■ Up to 200 characters for each target (varies from different targets)

■ 24 sequences supported

Components

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

Dimensions of Base - See Figure 5 - 6

Wiring - See Figure 7

1. Programming button / LED indicator
   The red LED indicator indicates programming mode.
   When the module is running normally, the indicator is green and flashing once for 1s.

2. RS485 connector

3. KNX 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 KNX-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 KNX-RS485 Interface Mini in the base.

Note(s)

■ Installation - Distribution box

■ Programming - The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).

■ KNX Bus voltage - 21~30V DC, no AC power supply allowed

⚠ 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.

Package Contents

M/RS485MNI.1(KNX-RS485 Interface Mini and base)*1 / Silica gel stopper*1 / Datasheet*1
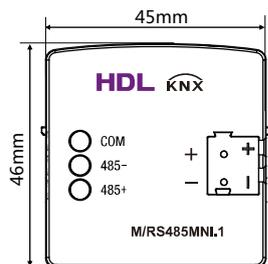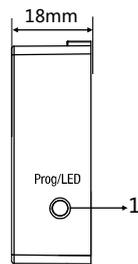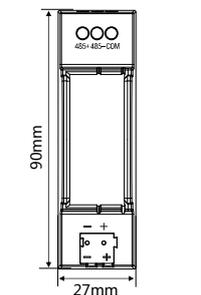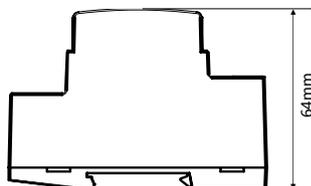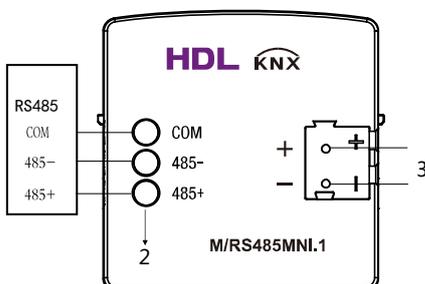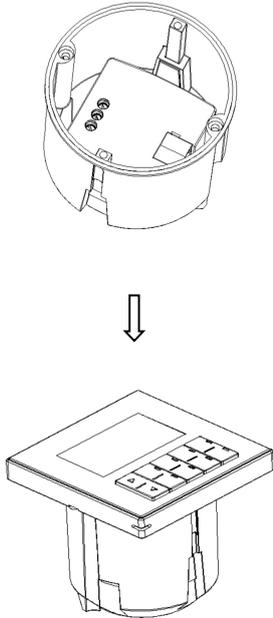
Figure 8. Wall box installation
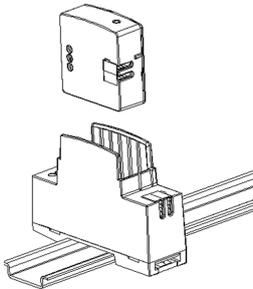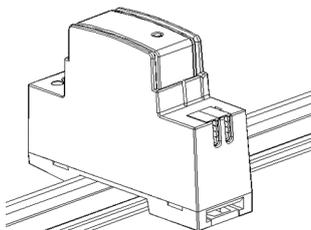
Figure 9. DIN rail installation

Technical support
E-mail: support@hdlautomaiton.com
Website: https://www.hdlautomation.com

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	10mA/30V DC
Communication	KNX, RS485
Data bit	7 bits, 8 bits, 9 bits
Stop bit	0.5 bit, 1 bit, 1.5 bits, 2 bits
Cable diameter of KNX terminal	0.6 – 0.8mm

External Environment

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

Specifications

Dimensions	KNX-RS485 Interface Mini: 45mm×46mm×18mm Base: 90mm×64mm×27mm
Net weight	KNX-RS485 Interface Mini: 25g Base: 44g
Housing material	KNX-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.

KNX Cable Guide

KNX	KNX cable
-	Black
+	Red