HDL-MBUS/GW-RF.40

Buspro/Wireless Gateway

Datasheet

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Figure 1. Buspro/Wireless Gateway

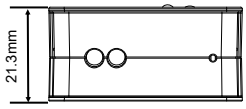


Figure 2. Top view

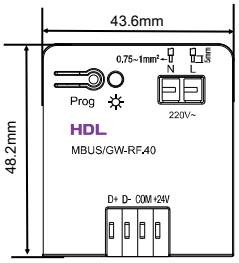


Figure 3. Front view

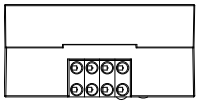


Figure 4. Bottom view

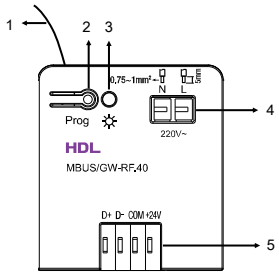


Figure 5. Components

Overview

HDL-MBUS/GW-RF.40 (See Figure 1) is an easy-to-use Buspro/Wireles Gateway that enables communication between Buspro devices and Buspro Wireless devices by the means of connecting with Buspro devices and converting its signal into Buspro Wireless signal.

Functions

- Supports IEEE.802.15.4
- Offers power supply to Buspro device that connects with it and converts its signal into Buspro Wireless signal
- Online update supported for both HDL-MBUS/GW-RF.40 and the device connected
- Supports easy programming

Important Notes

- HDL-MBUS/GW-RF.40 must be used in conjunction with HDL wireless mesh gateway
- One HDL-MBUS/GW-RF.40 can only be connected to one Buspro wired module.
- When HDL-MBUS/GW-RF.40 is connected to an HDL Buspro device, its address will automatically switch to that of the HDL Buspro device. And only the Buspro device, instead of HDL-MBUS/GW-RF.40, can be searched in HDL Buspro Setup Tool 2 after configuration.
- The subnet ID of the connected Buspro device must be the same as that of HDL Mesh Gateway.
- Installing HDL-MBUS/GW-RF.40 in any metal confined space will block the signal.
- Before updating HDL-MBUS/GW-RF.40, it must be disconnected from the wired Buspro device, or the updated will be the connected Buspro device.

Product Information

Dimensions - See Figure 2-3

Bottom view - See Figure 4

Components - See Figure 5

1. Antenna

2. Programming button with LED indicator: when the gateway is working normally, the programming button indicator will flash in green. Press the programming button three times to enter frequency configuration mode, and the LED will flash quickly in red. (HDL wireless gateway should enter frequency configuration mode at the same time to enable automatic parameter configuration.)

3. LED indicator

LED indicator flashes in green: one normal working HDL Buspro device connected

LED indicator keeps on in green: no HDL Buspro device connected

LED flashes in green and red alternatively: two or more Buspro devices are connected, which is prohibited.

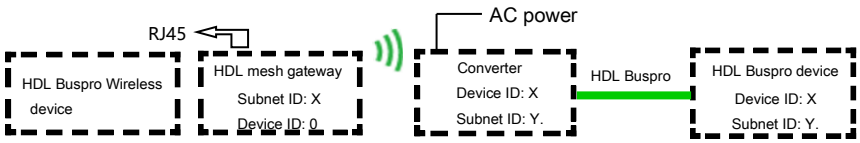
4. Power input (AC power connector): the cross-sectional area of connected cable should be 0.75~1mm² and the stripped ends should be 5~6mm.

5. HDL Buspro port: offers power supply and signal to the HDL Buspro device connected.

Installation - See Figure 6 - 7

1. Apply the foam tape to the back of the Gateway.
2. Stick the Gateway to the place according to the user's preference.

Connection Diagram



Note: the converter can only be connected to one Buspro device (the range of X is 0 - 254, Y is 1 - 254)

Safety Precautions

- The installation and commissioning of the device must be carried out by our company or the organization designated by our company. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- 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 replace parts, 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-MBUS/GW-RF.40*1 / Datasheet*1 / Buspro connector*1 / Double-sided foam tape*1

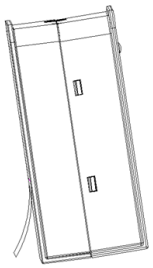


Figure 6. Installation (1)

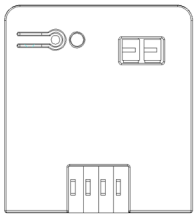


Figure 7. Installation (2)

Technical Data

Basic Parameters	
Input voltage	AC100-240V (50/60Hz)
Power consumption	1.15W
Output	100mA/24V DC
Wireless transmitted power	+10dbm
Wireless receiving sensitivity	-90dbm
Indoor communication distance	≤30m
RSSI (Received Signal Strength Indication)	>-80dbm
Frequency Allocation	
(China) WPAN	780 to 786MHz
(Europe) SRD	864 to 870MHz
(North America) ISM	904 to 928MHz
Default channel	780MHz
Default PSK	HDL-SecurityKey0
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	48.2×43.6×21.3 (mm)
Net weight	38g
Housing material	ABS
Installation	Stick with tape (See Figure 6 - 7)
Protection rating (Compliant with EN60529)	IP20
Live/null line	0.75~1mm^2
Stripped ends	5~6mm

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

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

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