



Figure 1. RS232/RS485 Gateway
图 1. RS232/RS485 转换器

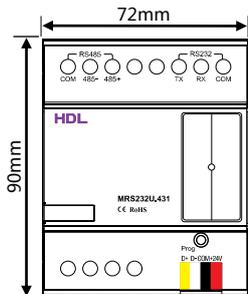


Figure 2. Dimensions - Front View
图 2. 尺寸图 - 正面

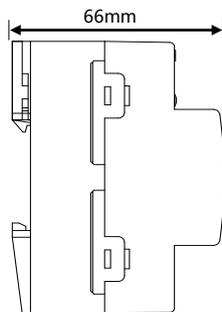


Figure 3. Dimensions - Side View
图 3. 尺寸图 - 侧面

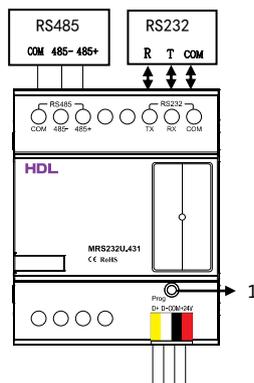


Figure 4. Wiring
图 4. 接线图

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/HDL Buspro/KNX 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.

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.

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

HDL-MRS232U.431*1 / Buspro connector*1 / Label*5 / Datasheet*1

产品概述

RS232/RS485转换器(见图1)是我司Buspro智能总线系统的配套产品。其外接的RS485/RS232接口采用了电器隔离防干扰技术。此设备可以实现RS485/RS232接口设备与Buspro系统设备双向通讯的功能。

功能说明

- 实现RS485/RS232接口设备与Buspro系统设备之间的相互控制
- RS485/RS232端口ASCII或十六进制数据--->Buspro协议, Buspro协议--->RS485/RS232端口ASCII或十六进制数据
- 最多可输入99个控制指令。每个控制指令最多可输入33个ASCII码
- RS485/RS232 接口波特率：1200、2400、4800、9600、1440、19200、38400、57600、115200bps，用户可自行设置
- 支持在线升级

注意事项

- 总线电缆 - CAT5E或HDL Buspro/KNX专用电缆
- 总线连接 - 推荐使用手拉手的连接方式
- 波特率 - 选择适合的波特率
- 支持RS232与RS485接口，但不能同时使用接口，只能选择其中一个

产品信息

产品尺寸- 见图 2 - 3

产品接线 - 见图 4

1. 模块指示灯,正常工作时闪烁, 按该键约3秒, 则可以在HDL Buspro软件中读取或修改本模块地址

设备的安装 - 见图 5-7

- 步骤1. 用螺丝固定导轨。
- 步骤2. 将RS232/RS485 转换器底盖的一端扣上导轨的边上。
- 步骤3. 将整个模块压到导轨上, 并滑动模块直至调整到合适的位置则固定下来。

安全警告

- 本设备的安装及调试工作必须由我司或我司指派的机构进行。其电气安装的计划和施工, 必须遵守当地相关的安全标准和法规。
- 该产品需以丁轨安装方式, 安装在电箱里, 未按照本说明书进行安装及接线方式的, 所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件, 否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行, 本产品的保修范围不适用于因用户拆卸产品而导致的故障。

装箱清单

HDL-MRS232U.431*1 / 总线端子*1 / 标签纸*5 / 说明书*1

Technical Data

Electrical Parameters

| | |
|-----------------|-------------|
| Working voltage | 15~30V DC |
| Working current | 15mA/24V DC |

Communication Parameters

| | |
|---------------|---|
| Baud rate | 1200, 2400, 4800, 9600, 14400, 19200, 38400, 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×66mm |
| Net weight | 310g |
| Housing material | Nylon, PC |
| Installation | 35mm DIN rail installation (See Figure 5 - 7) |
| 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 | x | - | - |
| Solder | x | o | o | o | - | - |
| PCB | x | o | o | o | o | o |
| IC | o | o | o | o | x | x |

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 "x" 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/KNX | CAT5/CAT5E |
|--------|------------|----------------|--------------------------|
| DATA+ | | Yellow | Blue/Green |
| DATA- | | White | Blue White/Green White |
| COM | | Black | Brown White/Orange White |
| 24V DC | | Red | Brown/Orange |

技术参数

电气参数

| | |
|------|-------------|
| 工作电压 | 15~30V DC |
| 工作电流 | 15mA/24V DC |

通信参数

| | |
|------|--|
| 波特率 | 1200, 2400, 4800, 9600, 14400, 19200, 38400, 57600, 115200 bps |
| 数据位 | 8 |
| 停止位 | 1, 2 |
| 通信方式 | HDL Buspro/RS232/RS485 |

外部环境

| | |
|--------|------------|
| 工作温度 | -5°C~45°C |
| 工作相对湿度 | ≤90% |
| 储存温度 | -20°C~60°C |
| 储存相对湿度 | ≤93% |

产品规格

| | |
|-----------------------|-----------------------|
| 尺寸 | 72mm×90mm×66mm |
| 净重 | 310g |
| 外壳材料 | 尼龙, PC |
| 安装方式 | 35mm 丁导轨安装 (见图5-7) |
| 防护级别 (符合 EN 60529) | IP20 |

产品中有害物质的名称及含量

| 部件名称 | 有害物质 | | | | | |
|-------|--------|--------|--------|---------------|------------|--------------|
| | 铅 (Pb) | 汞 (Hg) | 镉 (Cd) | 六价铬 (Cr (VI)) | 多溴联苯 (PBB) | 多溴二苯醚 (PBDE) |
| 塑胶组件 | o | o | o | o | o | o |
| 五金铜件 | o | o | o | o | - | - |
| 螺丝组件 | o | o | o | x | - | - |
| 焊锡 | x | o | o | o | - | - |
| PCB组件 | x | o | o | o | o | o |
| IC | o | o | o | o | x | x |

- : 表示不含有该有害物质。

o : 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x : 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

总线定义

| | HDL Buspro | HDL Buspro/KNX | CAT5/CAT5E |
|--------|------------|----------------|------------|
| DATA+ | | 黄 | 蓝/绿 |
| DATA- | | 白 | 蓝白/绿白 |
| COM | | 黑 | 棕白/橙白 |
| 24V DC | | 红 | 棕/橙 |



Figure 5 / 图 5

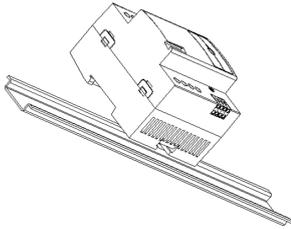


Figure 6 / 图 6

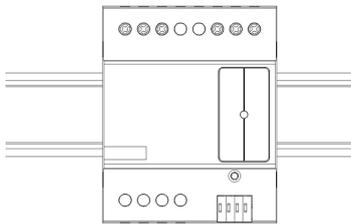


Figure 7 / 图 7

Figure 5 - 7. Installation
图 5 - 7. 安装图

技术支持

服务热线：020-85820195

(工作时间：9:00-12:00, 13:00-18:00, 星期一至星期五)

邮箱：kfb@hdlchina.com.cn

网址：http://www.hdlchina.com

Technical support

E-mail: support@hdlchina.com.cn

Website: https://www.hdlautomation.com