easyCtrl®

YC-RS.01A
RS232 Serial Module

Product Manual

Release : September 22, 2023
Version : V2.3

Figure1.RS232 Serial Module

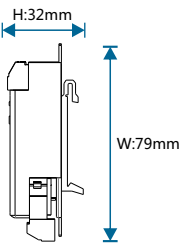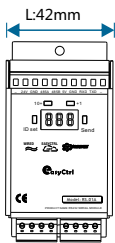L:42mm   H:32mm   W:79mm

Figure 2. Dimensional Drawing - Front View   Figure 3. Dimensional Drawing -Sideview
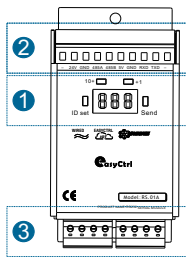

Figure 4. Product Information

Ten-digit address display : 0-6   The 1s address display : 0-9
Bus signal indicator
ID Set

Example: if the module address is set to 25.
Step 1: Long press the ID Set key, the 1s address flashes, short press to adjust to 5.
Step 2: Long press the ID Set key again, the ten-digit address flashes, short press to adjust to 2.
Step 3: Long press the ID Set key to exit the setup. If the ID Set key is not long pressed, the digital tube blinks for 10s to exit the setting.
Note: The address can be set in the range 01-63(decimal).
Note: Bus signal indicator light, circle means successful registration, no circle means not registered.

Figure 5. Address setup instructions

Ten digit instruction display   The 1s digit instruction display
Hundred digit instruction display
+10   +1
Send

Example: Set data to 21
Step 1: Press +10 key twice to 20, then press +1 key again to 21
Step 2: Press Send to send data concurrently through 485/232
Note: If no data is stored, press Send to send no data

Figure 6. Manually testing data sending

Product Overview

RS232 Serial Module (see Figure 1) serves as a system third-party equipment control unit, typically installed in a distribution box, rail installation. Through the bus control RS485/RS232 equipment, can control the third-party serial equipment, such as: RS485 air conditioning panel, projector, matrix third-party equipment.

Function Description

- Standard 35mm DIN rail installation: Occupies 2.5P module units.
- Provides one serial port, RS485/RS232 for concurrent.
- The serial port stores a maximum of 100 Hex commands, and a single command can contain up to 47 bytes.
- The serial port can send 100 commands and receive 100 commands into 100 key panels.
- The serial port supports various baud rates and parity check.
- Can be connected to projectors, sequencers, air conditioning panel and other serial devices.
- With local and remote programming and testing functions.
- Supports online firmware updates and Bus network disconnection alarm function.
- Supports YC-BUS communication.

Precautions

- Use RVV4*0.75 four-core wire for bus wiring.
- Do not connect the AB signal of the bus interface incorrectly; otherwise, the bus signal is abnormal.
- Do not connect RS485 and RS232 to the power supply; otherwise, the device will be burned.

Product Information

Product Dimensions: See Figures 2 and 3
Product Wiring: See Figure 7 and 8
Product Information: See Figure 4
1. Function Keys:
- ID Set key：Address setting 01-63, setting method (see Figure 5)
- +10 key：The channel number is relatively increasing, ranging from 0 to 5.
- +1 key：The data increases by 1.
- Send key：Sends the data stored in the serial port.
- +10/+1/Send key: command test button, select the command to be tested, click send, (see Figure 6).
2. Port wiring: : 24V ,5V are output voltages (see Figure 7)
3. Bus interface (see Figure 8) :
- Bus interface sequence: 24V, GND, A, B

Product Installation

See Figures 9-11
- Step 1. Secure the 35mm rail with screws.
- Step 2. Hold the 6 CH Infrared Emitter Module at a 45 degree angle with both hands, and the bottom of the module is clamped against the guide rail. The whole module is pressed to the guide rail at a 90 degree angle, and the module is slid until it is in the correct position.

Safety Warning ⚠ WARNING

- Tightening torque should not exceed 0.4 Nm.
- Installation location: Distribution box.
- Do not connect the YC-BUS interface incorrectly, as it may damage the equipment.
- The YC-BUS interface must not be connected to AC power; otherwise, it will damage all devices on the bus.
- Ensure a good ventilation environment.
- Do not expose to rain, contact with other liquids, or corrosive gases.

Packing List

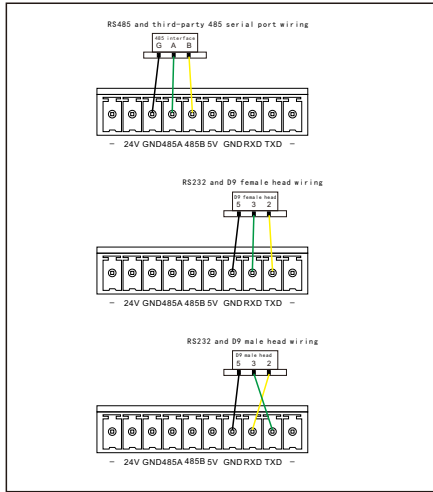- YC-RS.01A*1/User Manual*1/Certificate of Conformity*1
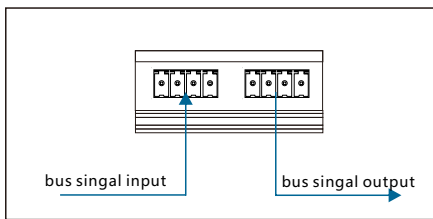
Figure 7. Serial port wiring
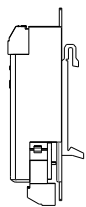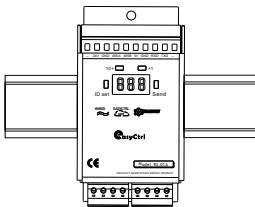

Figure 8. Bus interface wiring instructions

bus singal input   bus singal output

Figure 9

Figure 10

Figure 11

Technical Parameters

Basic Parameters

Operating Voltage	24VDC±10%
Rated Consumption	≤0.4W
Output Voltage	24VDC±10%/5VDC±10%
Output Circuit	1 serial port, 485 and 232 concurrent
Data Storage	send 100 data, receive 100 data
Bus Interface	bus interface*2
Display Interface	4*light touch function key; 3*digital tube LED light
Protection	NONE

External Environment

Operating Temperature	-5℃~45℃
Operating Relative Humidity	≤90%
Storage Temperature	-20℃~60℃
Storage Relative Humidity	≤93%

Product Specifications

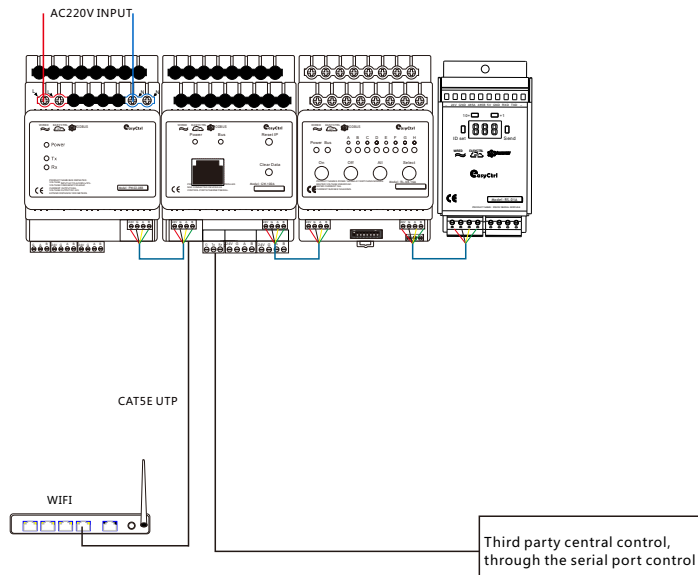|	
Dimensions (L*W*H)	42 mm*79 mm*32 mm
Net Weight	≤116 g/pcs
Enclosure Material	brushed aluminum shell technology
Installation Method	standard 35mm DIN rail mounting **(see Figure 9-11)**
Protection Level	NONE

System Diagram

Notebook

Mobile terminal (IOS/Android)

AC220V INPUT

CAT5E UTP

WIFI

Third party central control, through the serial port control