USB<=>RS-485/RS-422/RS-232/TTL
E810-U15H Instruction Manual
Industrial High Rate Opto-isolated Converters

Chapter 1 Product Introduction

With the continuous development of the industrial automation industry, the USB interface is gradually replacing the old PC's various low-speed peripheral interfaces, however, many devices in the current industrial environment are still designed using RS-232/RS-422/RS-485/TTL interfaces, so many users are using USB to RS-232/RS-422/RS-485/TTL converters for data transfer between PC and serial devices.

The E810-U15H is a high speed USB-RS-232/RS-422/RS-485/TTL converter interface that supports up to 12M serial port rate without external power supply, and is capable of converting USB signals to RS-232/RS-422/RS-485/3.3V/5V TTL signals, with surge protection provided on each interface.

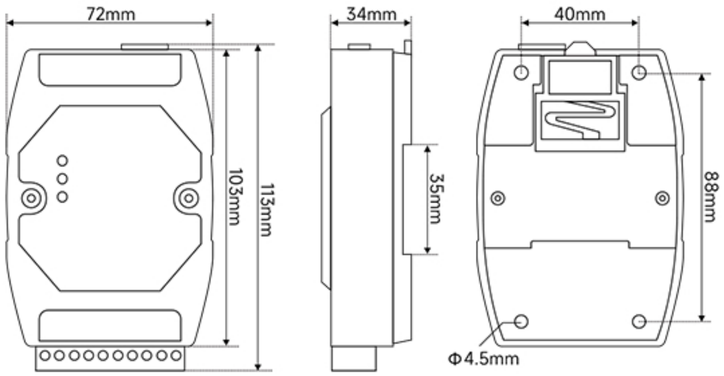
E810-U15H interface converter can provide reliable connection for point-to-point and point-to-multipoint communication, point-to-multipoint each converter can allow the connection of 128 RS-422 or RS-485 interface devices, the device has a power indicator and data flow indicator can be used to observe the status of the device, support for communication modes USB to RS-232, RS-422, RS-485, TTL data conversion between. 485, TTL data conversion.

Chapter 2 Features

- The USB interface adopts Type-c interface, which is convenient, easy to use and reliable;
- Supports 3.3VTTL and 5V TTL full duplex communication;
- Supports three-wire RS-232 full duplex communication;
- Supports four-wire RS-422 full-duplex communication;
- Supports two-wire RS-485 half-duplex communication;
- A 120Ω matching resistor (1/4W) can be connected in parallel at the line terminals when multiple devices are connected externally to the converter or when communicating over long distances.

Chapter 3 Hardware Installation And Applications

E810-U15H adopts rail + positioning hole mounting method, you can choose any one way to use. Note the snap width of 35mm for rail mounting, and refer to the base dimension drawing for locating hole mounting.



Chapter 4 Shipment List

1、E810-U15H 1 unit　2、USB to type-c adapter cable 1pc　3、10P 5.08 terminal block 1pc
4、1 certificate of conformity　5、1 copy of product instruction manual

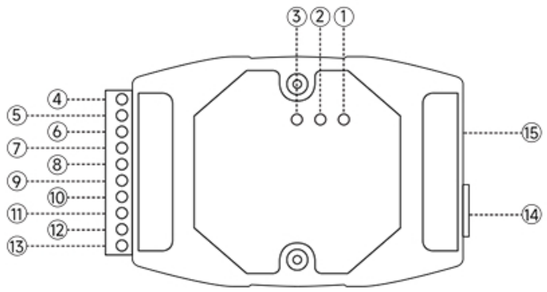
Chapter 5 Driver Installation

The product supports windows 10 or above drive-free use, you need to install the driver, you can go to our official website to download the corresponding product below.

Chapter 6 Performance Parameters

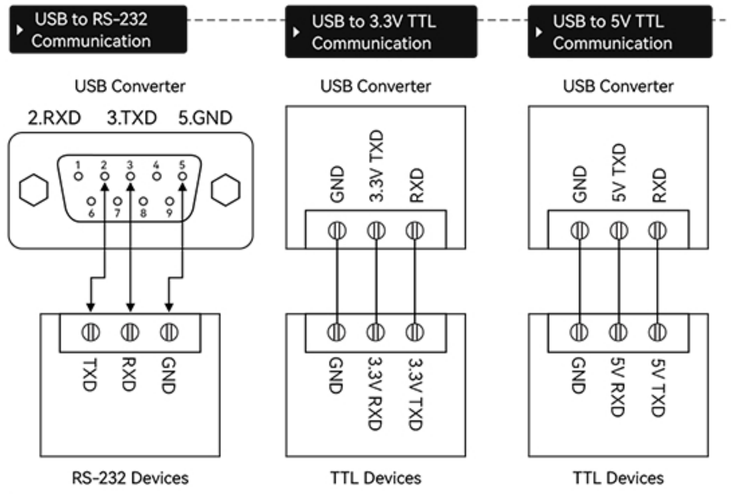
USB Protocol Standard	USB2.0, backward compatible with USB1.0, USB1.1
USB Interface Standard	type-c interface
RS-232 Interface Standard	Standard DB9 male, Full duplex 2: RXD　3: TXD　5: GND
RS-485 Interface Standard	2P 5.08mm terminals, Half duplex
RS-422 Interface Standard	4P 5.08mm terminals, Full duplex
TTL Interface Standard	4P 5.08mm terminals, Compatible with 3.3V and 5V levels
Power Output	2P 5.08mm terminals, 5V, Maximum output current 100mA
Isolated Voltage	3KV
Static Protection Level	Contact 4KV, Air 8KV
Pulse Surge	Differential mode 1KV, Common mode 2KV
Protection Class	Industrial EMC class 3
Baud Rate Range	RS-485/422: 110~12Mbps
	TTL: 110~12Mbps
	RS-232: 110~460800bps
	Adaptive baud rate support
Product Size	113×72×34mm
Product Weight	120±5g
Working Temperature And Humidity	-40~+85℃、5%~95%RH（Condensation-free）
Storage Temperature And Humidity	-40~+105℃、5%~95%RH（Condensation-free）

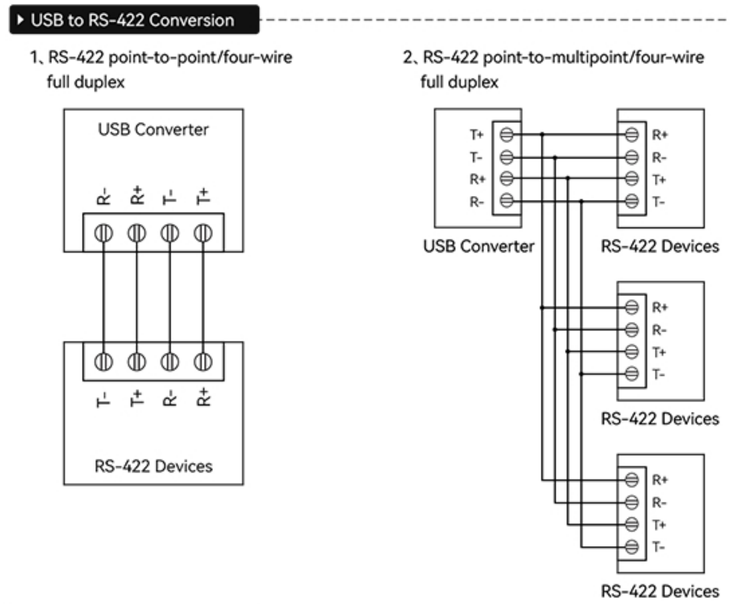
Chapter 7 Interface Definitions

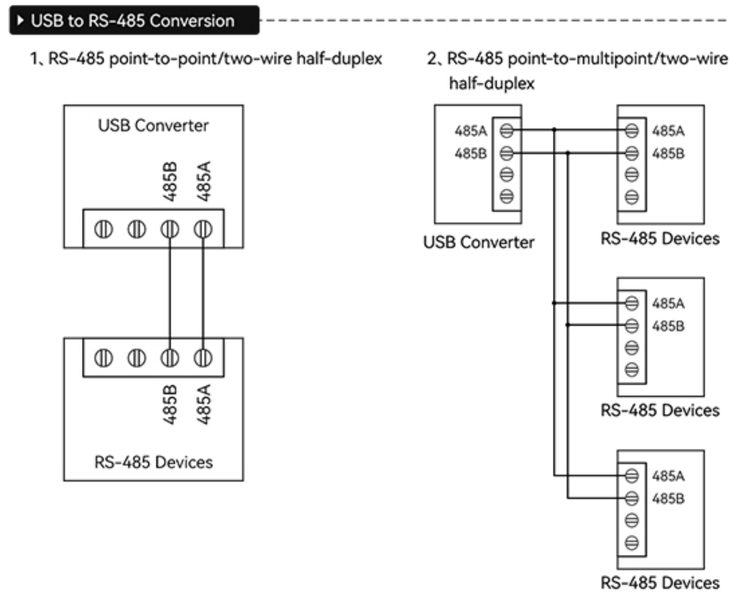


Serial Number	Name	Interface Description
1	PWR	Power indicator, red, lights up when powered on
2	TXD	Data send indicator, yellow, blinks when USB sends data
3	RXD	Data Receiving Indicator, yellow, blinks when USB is receiving data
4	EARTH	Ground terminal for connection to earth
5	T+/A	RS422 T+ terminal, R+ terminal of user equipment when used as RS422; A terminal of user equipment when used as 485
6	T-/B	RS422 T-terminal, connects to the R-terminal of the user device when used as RS422; connects to the B-terminal of the user device when used as 485
7	R+	RS422 R+ terminal, T+ terminal for connection to user equipment when used as RS422
8	R-	RS422 R-terminal, T-terminal for connection to user equipment when used as RS422
9	3.3V TXD	TTL 3.3V TXD interface to connect the remaining TTL interface devices RXD interface
10	5V TXD	TTL 5V TXD interface, connects to the RXD interface of the remaining TTL interface devices
11	RXD	TTL RXD interface, connect the rest of the TTL interface device TXD interface; support 3.3V and 5V adaptive
12	GND	Negative power output interface or digital ground signal interface, can be used in combination with VCC
13	VCC	Power output positive connector, maximum output 5V 100mA current
14	RS232	DB9 male, 2 pins for RXD interface, 3 pins for TXD interface, 5 pins for GND interface
15	USB	Standard Type-C connector

Chapter 8 Schematic Diagrams Of Communication Connections







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