RS485-HUB-8P

From Waveshare Wiki

Overview

Introduction

RS485-HUB-8P is an industrial grade isolated RS485 hub that can expand 8-ch RS485 slave ports through 1-ch RS485 master port and can realize relay, extension, and isolation functions of RS485 network, with screw terminal for power input. Rail-mount case design, easy to install, and cost-effective. It is suitable for applications like data acquisition, IoT gateway, safety & security IoT, and intelligent instrument monitoring...

RS485-HUB-8P

(https://www.waveshare.com/rs485-hub-8p.htm)

RS485, RS485 HUB 8-ch Isolation

Specification

Interface Standard	Compliant with RS485 Standard
Physical Interface	RS485 Screw Terminal
Baudrate	300~460800bps (self-adaptive)
Supported Nodes	Each RS485 port supports up to 32 nodes
Communication Distance	1200m (9600bps), the higher rate the shorter distance
Operating Method	RS485 two-wire (A, B), half-duplex transparent transmission
Power Supply	DC 9~24V
Operating Temperature	-45 ~ +85℃
Environment Humidity	<95%RH
Transmission Medium	Normal parallel cables/twisted-pair cables

Interface Introduction
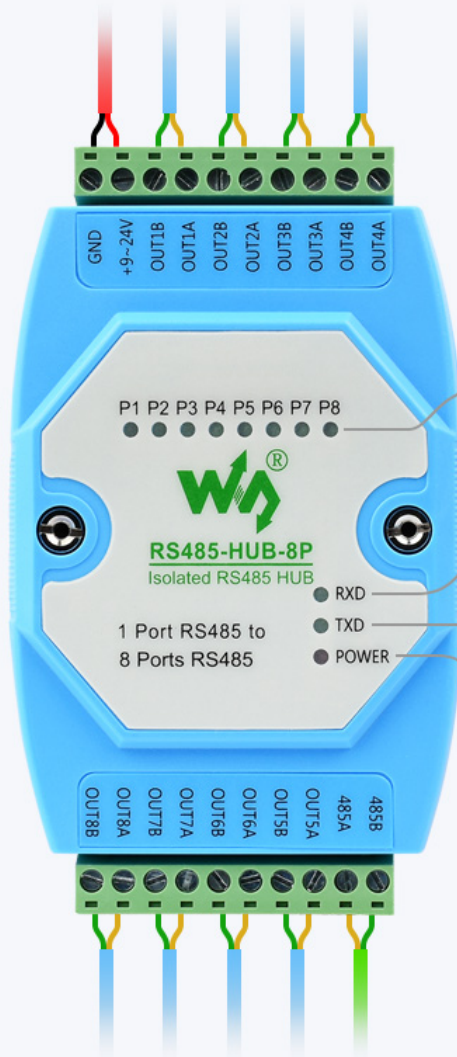
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Onboard Resource	Description
+9 ~ 24V, GND	Power Screw Terminal
OUT1A ~ OUT8A, OUT1B ~ OUT8B	RS485 Slave Port 1 ~ 8
485A, 485B	RS485 Master Port
P1 ~ P8	RS485 1 ~ 8 Slave Port Data Receiving Indicator
RXD	485 Master Port Data Receiving Indicator
TXD	485 Master Port Data Transmitting Indicator
POWER	Power Indicator

Function Description
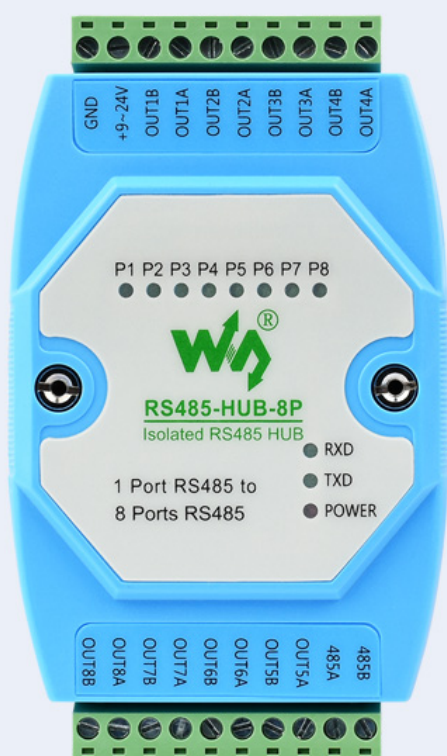
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Extension

When the master RS485 device needs to connect 8x RS485 slaves in a star connection, connect the master to the RS485-HUB-8P master port and the slaves to the RS485-HUB-8P

slave port. It can prevent interference between RS485 and isolate effectively.

Isolation

By connecting one end of the RS485 to the RS485 master port and the other end to any RS485 slave port, the RS485 cable is effectively isolated and protected from lightning strikes and interference. The other end of RS485 is effectively protected from damage by high voltage and strong current.
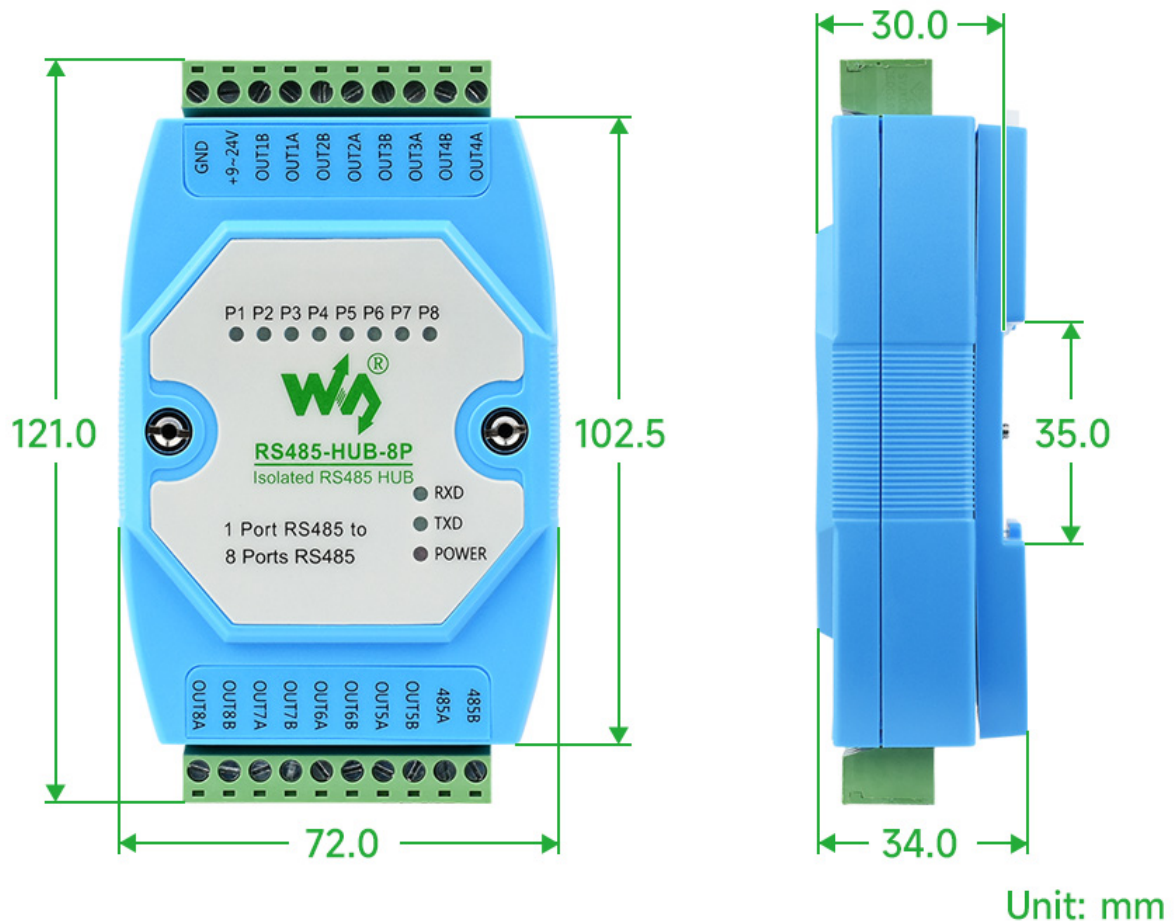
Relay

When the RS485 cable exceeds a long distance such as 1200 meters, the signal will be attenuated and interference will increase. By using RS485-HUB-8P, the communication distance can be extended.

Hardware Connection Diagram
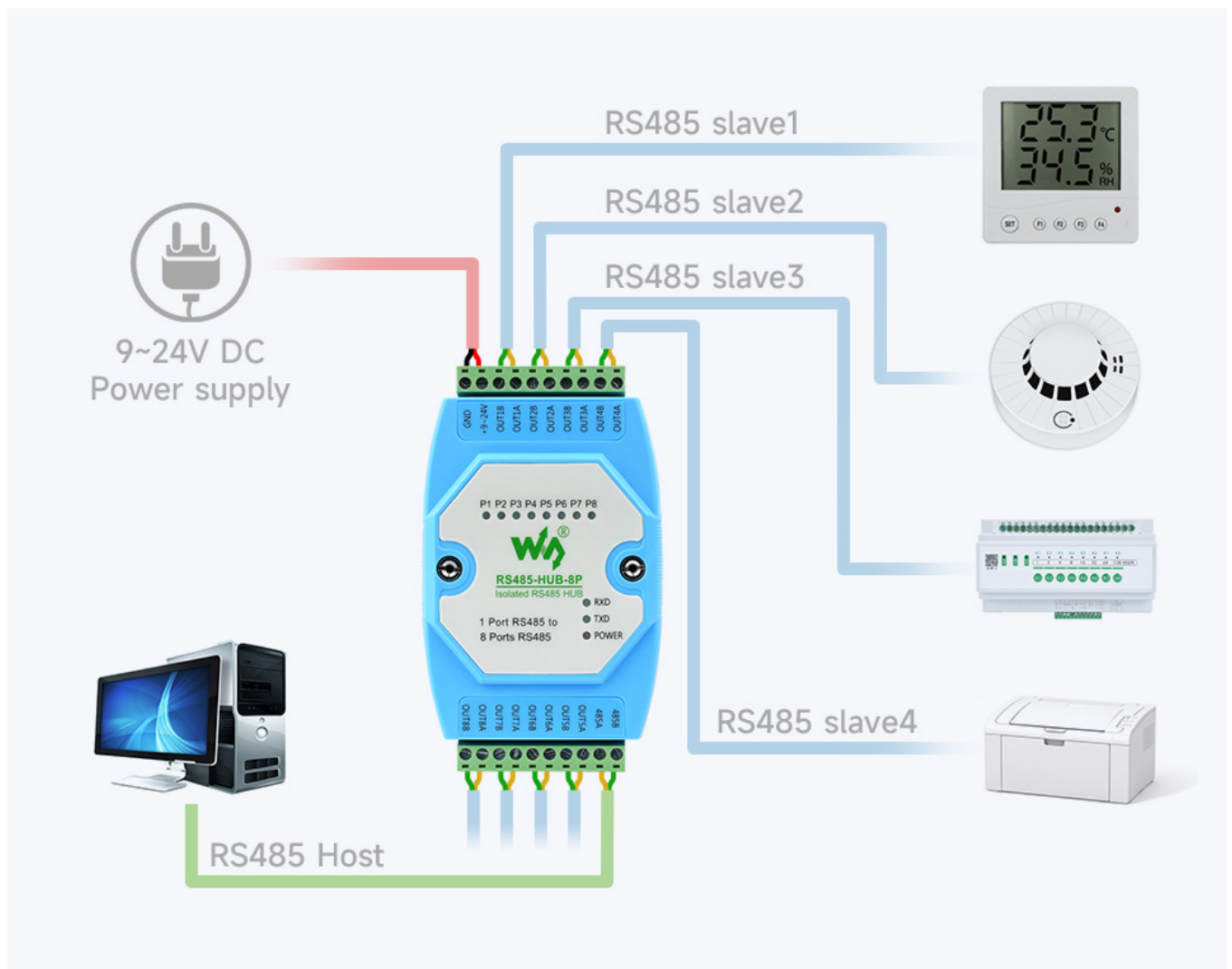
Outline Dimensions

Support

Technical Support

If you need technical support or have any feedback/review, please click the **Submit Now** button to submit a ticket, Our support team will check and reply to you within 1 to 2 working days. Please be patient as we make every effort to help

Submit Now (https://service.waveshare.com/)

you to resolve the issue.

Working Time: 9 AM - 6 AM GMT+8

(Monday to Friday)