

Industrial RS485 Opto-Isolated Hub

FIT0821

Product Overview

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For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot Industrial RS485 Opto-Isolated Hub is a 4-port bus split hub specifically designed to meet the requirements of RS485 large-scale systems in complex electromagnetic environments. The RS485 interface adopts photoelectric isolation technology to prevent the lightning surge from being introduced into converters and equipment.



The RS485 opto-isolated hub has a transmission that reaches up to 115.2Kbps. This hub provides a star RS485 bus connection, and each port has short-circuit and open-circuit protection. The RS485 opto-isolated hub can provide more than 1200m transmission distance in RS485 working mode. This hub features $9V_{DC}$ to $30V_{DC}$ /150mA working voltage supply, 2500V isolation voltage, twisted pair or shielded wire transmission mode, and 10-position pluggable terminal blocks on both sides.

Specifications

- Interface characteristics:
 - The interface is compatible with EIA/TIA's RS-232C and RS-485 standards
- Electrical interface:
 - 10-position pluggable terminal blocks on both sides
- Transmission medium:
 - Twisted pair or shielded wire
- Asynchronous half-duplex working mode
- $9V_{DC}$ to $30V_{DC}$ /150mA working power supply
- Signal indication:
 - 7 signal indicator lights, power (PWR), sending (TXD), receiving (RXD), and malfunction (E1-E4)
- 2500V isolation voltage
- 300bps to 115.2Kbps transmission rate
- Protection level:
 - RS-232 port $\pm 15kV$ ESD protection, RS-485 port 600W lightning surge protection per line
 - 0km to 5km (115.2Kbps to 300bps) transmission distance range

Specifications

- Usage environment:
 - -25°C to 70°C temperature range, 5% to 95% relative humidity range, and ≤3000m altitude
 - 120mm x 77mm x 40mm / 4.72" x 3.03" x 1.57" dimensions

Mouser Part Number

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To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-industrial-rs485-hub/>