

Model: UT-1128

(Product Name: 8-Port RS-485 Isolated Hub)

Datasheet



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1. Overview

UT-1128 is a RS-485 BUS hub with built-in dual core, and non-halt design. It is special design for RS-485 system under complicated electromagnetic field. The transmission rate can be as high as 115.2Kbps. To ensure the data communication safety and reliability, it adopts optoelectronic isolation technology, and provides with lightning and surge protection on RS-485 ports; the built-in optoelectronic isolator and 1,500W surge protection circuit provide 2,500V isolated voltage, this prevent the devices from lightning and ESD, and ground interference. With external power, UT -1128 is quite safe for outdoor projects.

Under RS-485 working mode, the circuit can distinguish the data flow direction, and switch it automatically to control the circuit; this easily solves the transmission delay issue. The transmission distance is over 1,200m. UT-1128 is a high performance converter, which is widely used in highway toll collection system, road monitoring system, and power collection system.

UT-1128 provides RS-485 BUS connection, each port supports short-circuit and open circuit protection. 2,500V isolated voltage allows user improve the RS-485 BUS structure, divide the network segment easily. When the device under lightning stroke or the device is breakdown, these network segments will be isolated, so as to ensure the other network segments working normally; this improves the RS-485 network reliability, makes the network maintain time be shorter. UT -1128 is the best choice for reliable RS-485 system.

2. Major Functions & Features

- Supports RS-232/RS-485 to 8 ports RS-485 hub

3. Technical Parameters

- Standards: RS-232C, RS-485 EIA/TIA
- Voltage input: DC12-48V 350Ma
- Transmission media: Twisted pair or shielded cable
- Working mode: Asynchronous half-duplex
- Indicators: signal, PWR, TX, RX, E1-E8
- Isolation: non-stop isolated voltage 2,500VRMS 500VDC, DC/DC isolated module
- Transmission rate: 300bps-115.2Kbps
- Protection:
 - Each wire 15KV ESD protection for RS-232 ports;
 - 1,500W lightning and surge protection for RS-485 ports
 - 2,000V lightning and surge protection for power supply
- Transmission distance: 0-1.2km (115,200-300bps)
- Dimension: 145x90x40mm
- Working environment: -40 ~ -85 °C , relative humidity 5%-95%

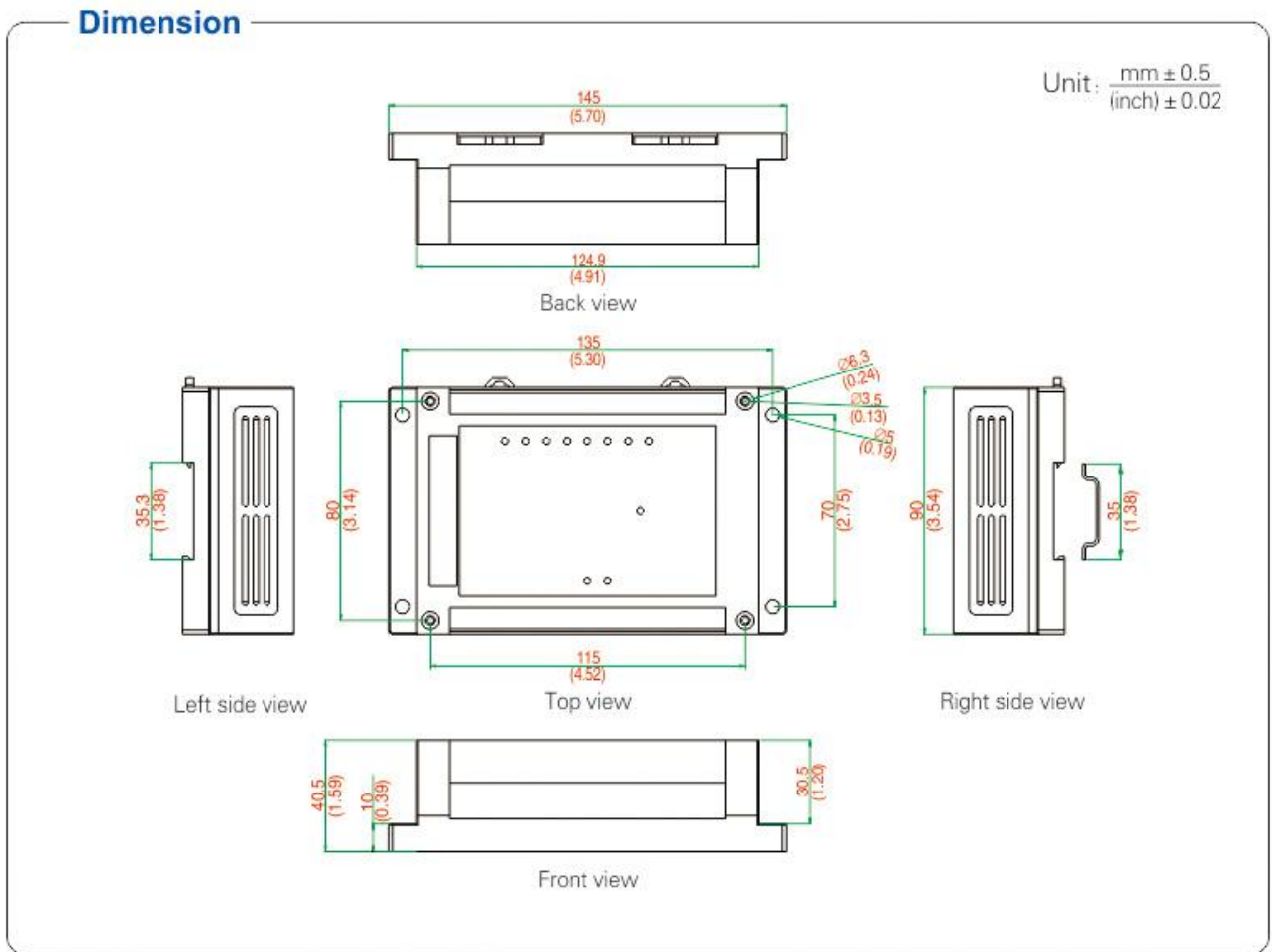
4. Interface Definition

No.	Definition	Remarks	No.	Definition	Remarks
1	VCC	Power +	25	A3	3 rd RS485+ output
2	GND	Power -	26	B3	3 rd RS485- output
3	Empty	Empty	27	A4	4 th RS485+ output
4-5	EARTH	Earth connection	28	B4	4 th RS485- output
6-15	Empty	Empty	29-32	GND	RS485 output ground connection
16	A	RS485+ input	33	A5	5 th RS485+ output
17	B	RS485- input	34	B5	5 th RS485- output
18	GND1	Ground connection input	35	A6	6 th RS485+ output
19	232RXD	RS232 receiving terminal	36	B6	6 th RS485- output
20	232TXD	RS232 transmitting terminal	37	A7	7 th RS485+ output
21	A1	1 st RS485+ output	38	B7	7 th RS485- output
22	B1	1 st RS485- output	39	A8	8 th RS485+ output
23	A2	2 nd RS485+ output	40	B8	8 th RS485- output
24	B2	2 nd RS485- output			

5. Product View (Appearance)



6. Structure dimensions



7. Ordering

Ordering										
Model	Signal/Port		Protection		Baudrate	Environment			Power	
	RS-232/485	RS-485	RS-232	RS-485/422		Temperature		Humidity	Port-Powered	External Power
	Terminal block	Terminal block				-25/70°C	-40/85°C	5-95%		
UT-1128	✓	✓	± 15KV ESD	1500W Surge	300bps-115.2kbps	✓	✓	✓	✓	12-48VDC