

Model:UT-2209

Industrial RS-485 Repeater with Isolation

Datasheet



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1. Overview

UT-2209 is a repeater with optoelectronic isolation. It complies with RS-485 standard; it can extend the communication distance of RS-485 BUS network, and increase the quantity of RS-485 network devices. The built-in DC/DC isolated module can provide as high as 2,500V_{rm} isolated voltage; the fast transient voltage suppression on both sides is designed to protect RS-485 interface; it adopts advanced TVS (TRANSIENT VOLTAGE SUPPRESSOR); normally, TVS tube is in high impedance state; when both sides of TVS tube suffer from high power impact in a sudden, the voltage suppression will fast lower the impedance from both sides, and soak large current; with this, the voltage on both sides are fixed at presupposed value, protects the component of circuit from damage. This voltage suppression provides 600W each wire with lightning and ESD protection, and surge voltage and instant over voltage protection on circuit which causing by all reasons; the tiny inter-electrode capacitance ensures high speed transmission for RS-485 ports. RS-485 adopts 2-pin terminal block as input and output.

2. Major Functions & Features

- Industrial RS-485 Repeater with Isolation

3. Technical Parameters

- Standards: RS-485 TIA/EIA
- Connector: RS-485 2 bits terminal block input
RS-485 2 bits terminal block output
- Protection: RS-485 provides with 600W lightning, surge, ± 15 KV ESD protection each line
- Operating mode: asynchronous half-duplex
- Signal indication: PWR TXD, and RXD activity
- Transmission media: twisted-pair or shielded cable
- Baud rate: 300BPS-115.2K BPS
- Dimension: 89mm x 73mm x 22mm
- Installation: Wall Mounting
- Operating temperature: -40 ~ 85°C
- Relative humidity: 5 ~ 95 % (Non-condensing)
- Transmission distance: 0-1,200m (115,200bps-9,600bps)

4. Pin assignment

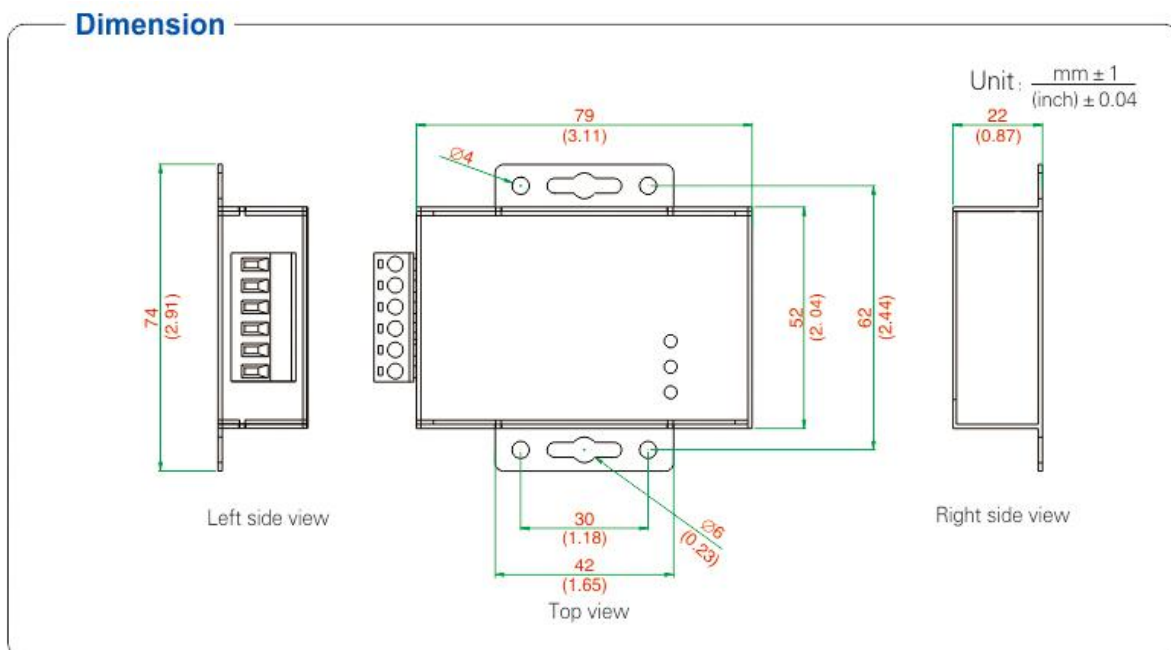
Input signal pin assignment

Terminals(Pin)	Signal Definitions	Signal Description
1	VCC	DC9-24V input
2	GND	Power ground
3	T/R+	RS-485+ input
4	T/R-	RS-485- input
5	T/R+	RS-485+ Isolated output
6	T/R-	RS-485- Isolated output

5. Product View (Appearance)



6. Structure Dimensions



7. Ordering Information

Model	Signal/Port		Protection	Baud rate	Environment			Power	
	RS-485	RS-422			Temperature		Humidity	Port-powered	External power
	Interface		RS-485		-25~70°C	-40~85°C	5~95°C		
UT-2209	√		±15KV ESD/ 600W Surge	300bps-115.2kbps		√	√		9-24V