Model:UT-901

433MHz Carrier to RS-232/485/422 Wireless Data Transmission Converter

Datasheet

1. Overview

UT-901 is a self-developed industrial grade wireless communication module, supporting MODBUS and ASCII protocols, and various point-to-point and point-to-multipoint wireless data communication methods, with the characteristics of integrated transceiver, security isolation, installation isolation, simple use, high cost performance, stability and reliability.

UT-901 wireless communication module can be widely used in industrial automation control scenarios such as factory centralized monitoring, water conservancy engineering, three-dimensional warehouse, oil extraction and transmission measurement and control, mining machinery, environmental protection monitoring equipment, stage machinery, lifting equipment, electric power, rail transportation, automated production equipment, access control system, consumer system, parking system, highway toll station system and other occasions requiring remote acquisition and communication.

2. Main functions, features

- Support 433MHz carrier wave to RS-232/485/422 wireless digital transmission module With relay routing

3. Technical Parameters

- Carrier frequency: 433MHz ISM, 16 signal channels setting available
- Communication interface: RS-232, RS-485, RS-422
- Electrical interface: RS-232 DB9 male, RS-485/422 terminal bock, SMA
- Protection: RS-485/422 each line with 600W lightning surge protection
- Voltage: 9-30VDC
- Current: 9V@400mA
- Transmission rate: 1,200 bps, 2,400 bps, 4,800 bps,
- 9,600 bps, 19,200bps, 38,400bps
- Operating mode: Transceiver, asynchronous half-duplex
- LED indicator: PWR TXD, and RXD
- Antenna impedance: 50Ω(antenna:360°rotate standard, 90°folding)
- Transmitting power: optional (40mW\150mW\405mW\520mW)
- Operating temperature:-40 ~ 85℃
- Operating humidity: 10 ~ 90RH (non-condensing)
- Dimension: 97×65×22mm (without antenna)
- Transmission distance: Wireless carrier 433MHz 300m (Maximum power transmitting empty range RS-232 5O m (1200bps-384bps) ,RS-485/422 1200m (1200b(bps-38400bps)

4. Interface Definition

Connectors and Signals

RS-232 pin assignment:

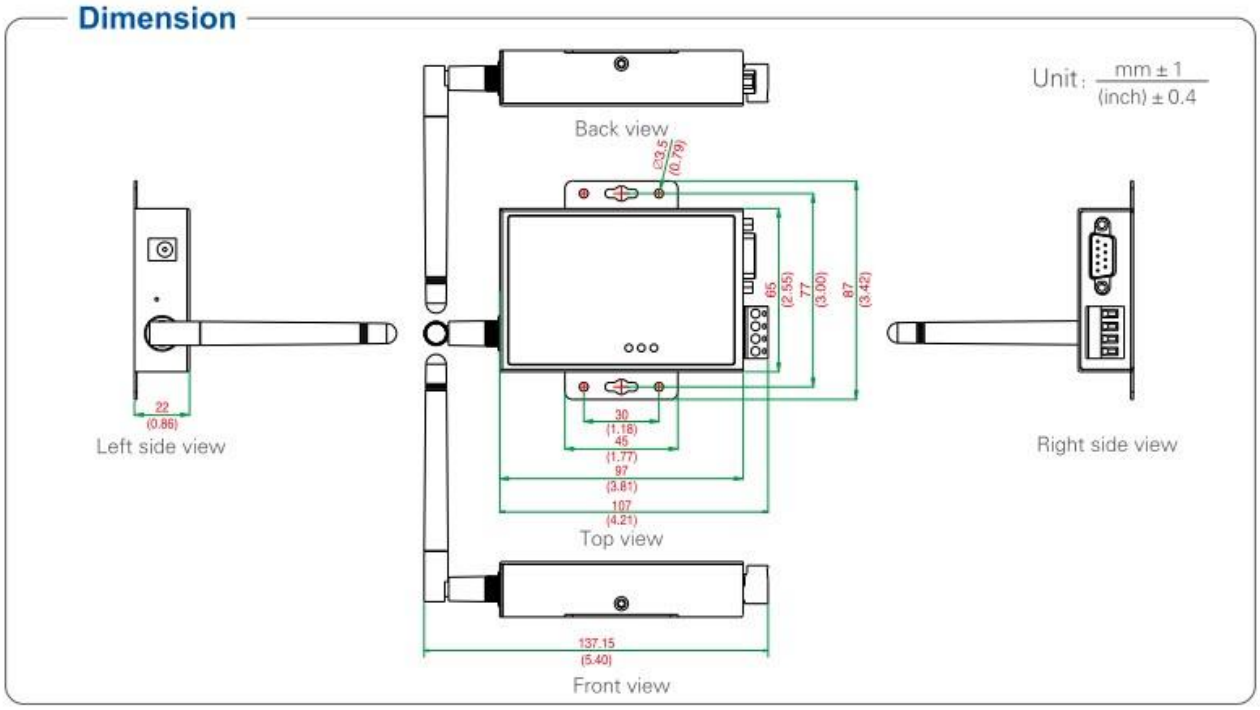
DB9 Male	RS-232C interface signal
2	SIN(RXD)
3	SOUT(TXD)
5	GND
1,4,6,7,8,9	/

RS485/422 output signal and terminal pin assignment:

Wiring Post	Output signal	RS-422 Full-duplex wiring	RS-485 half-duplex wiring
1	T/R+	Send(A+)	RS-485(A+)
2	T/R-	Send(B-)	RS-485(B-)
3	RXD+	Receive(A+)	/
4	RXD-	Receive(B-)	/

5.Product View (Appearance)

6. Structure Dimensions



7.Ordering Information

Ordering

Model	Signal/Port			Port qty		Protection		Baudrate	Environment			Power	
	433MHz	RS-232	RS485/422						Temperature		Humidity		
	SMA	DB9 male	Terminal block	433MHz	RS-232/ 485/422	RS-232	RS-485/422		-10/70℃	-40/85℃	5-95%	Port-Powered	External Power
UT-901	✓	✓	✓	1	1	±15KV ESD	600W Surge	1,200bps-38.4kbps		✓	✓		9-30VDC

Accessaries: Power adapter, antenna, and serial cable.