



RFU-433

Features

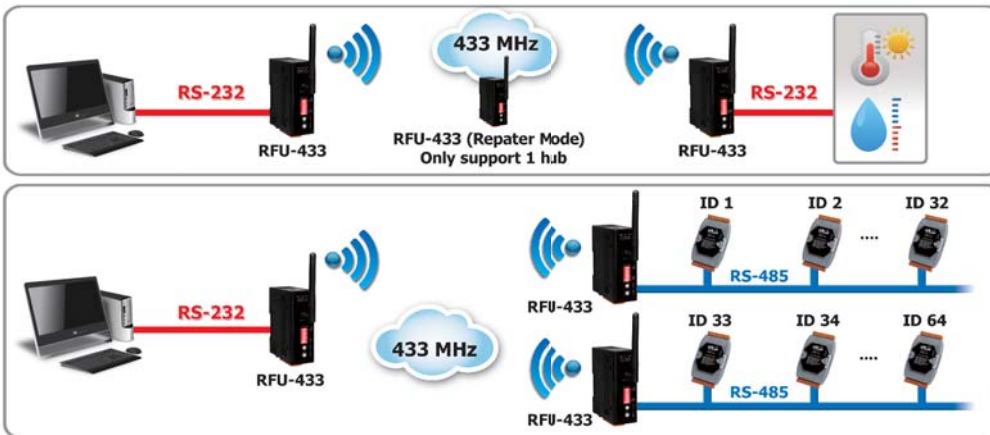
- 433MHz Radio Frequency
- Supports 16 RF Channels
- Supports 650 ~ 57600 bps Baud Rate for RF
- Provides a PA switch to enhance the RF power
- Wireless Transmission Range up to 500 meters (Line of Sight) at 9600 bps RF Baud Rate and output power 10 dBm.
- Transparent transmission mode
- Provides 1200 ~ 115200 bps Baud Rate for RS-232 and RS-485 interfaces
- ESD Protection: Contact ± 4 kV
- Isolation: 3000 VDC for DC-to-DC, 2500 Vrms by photocoupler
- CE certification
- DIN-Rail Mountable
- Operating Temperatures, $-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$



Introduction

The RFU-433 is a RS-232 / RS-485 to 433 MHz radio modem. It can transfer the RS-232 / RS-485 data to RF messages with 433 MHz in transparent mode, and provides the maximum line of sight transmission distance 500 meters at 9600 bps RF Baud Rate. In order to overcome hash environments, the RFU-433 allows the configurable RF transmission baud to the minimum 650 bps to enhance the capability of resist the noise and disturbances. Moreover, the features of adjustable RF channels and Group IDs are helpful to avoid the interference by adjacent two RFU-433 networks. Users can easy to use 16 RF channels and 8 Group IDs to distinguish and control the different RFU-433 networks as they wish.

Applications

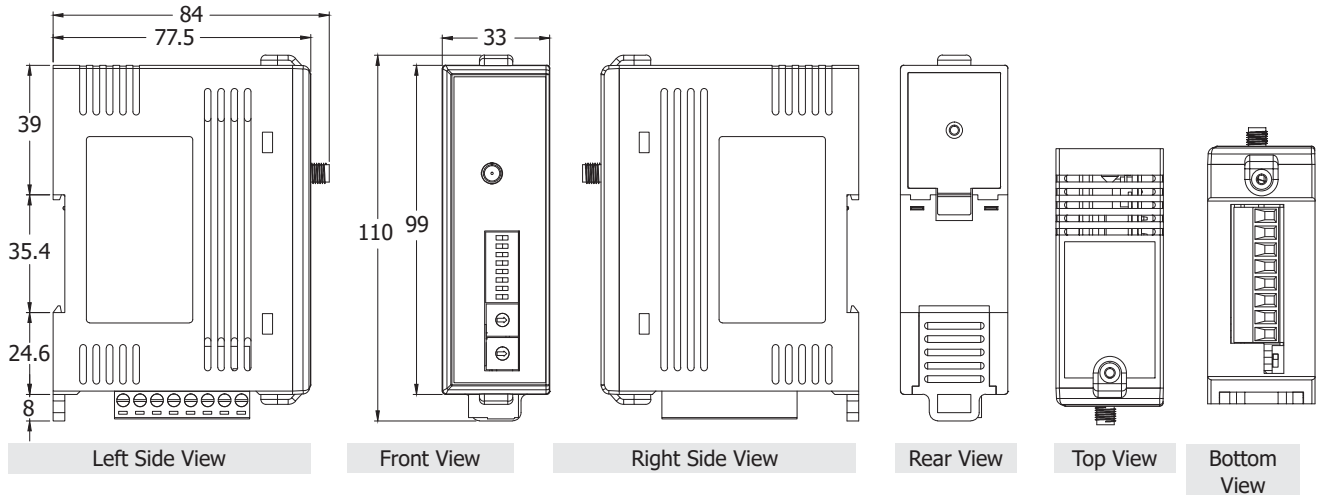


Specifications

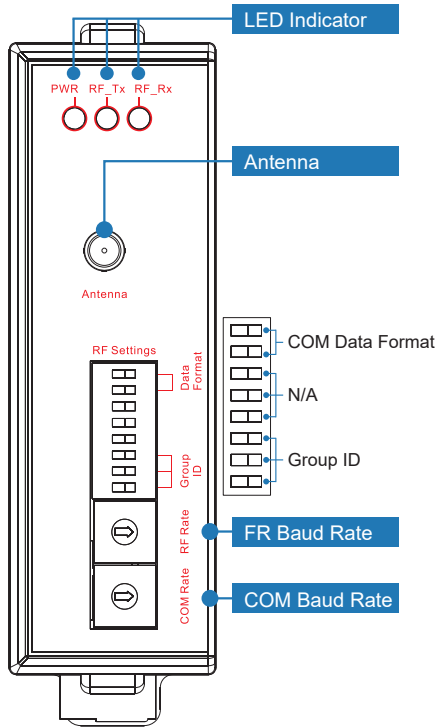
RF Interface	
Radio Frequency	433.1000 MHz ~ 434.6000 MHz
Baud Rate	57600, 38400, 19200, 9600, 4800, 2400, 1200, 650 bps
Transmission Power	Normal : 10 dBm , Max : 19 dBm
Antenna	0 dBi Omni directional, RPSMA connect
Transmission Distance (LoS)	500 m (9600 bps, output power 10 dBm)
Group ID	0 ~ 7
Protocols	Transparent transmit
Temporary Buffer Size	512 Bytes
LED Indicators	
RF_Tx	Green
RF_Rx	Yellow
PWR	Red
Isolation	
Intra-module Isolation	2500 Vrms by photocoupler (RS-485 / RS-232 side)

EMS Protection	
ESD	± 4 kV Contact
EFT	± 1 kV
Surge	± 1 kV
Power	
Input Voltage Range	+10 VDC ~ +30 VDC
Power Consumption	1 W (Max.)
Mechanism	
Flammability	Fire Retardant Materials
Dimensions (L x W x H)	107 mm x 33 mm x 83.1 mm (not include antenna)
Antenna Dimensions (L x Ø)	108 mm x 10 mm
Installation	DIN-Rail
Environment	
Operating Temperature	$-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
Storage Temperature	$-30^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Relative Humidity	10 ~ 90% RH (non-condensing)

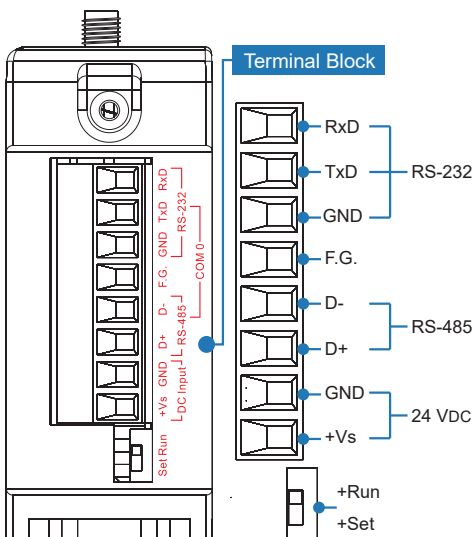
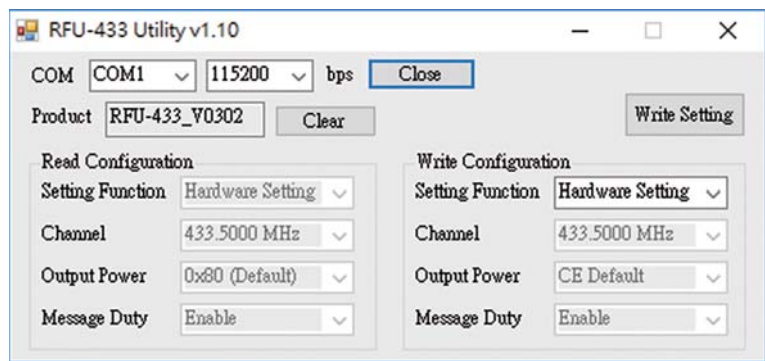
■ Dimensions (Units: mm)



■ Appearance





■ Utility



■ Ordering Information

RFU-433 CR	RS-232/RS-485 to 433 MHz Radio Modem (RoHS)
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■ Accessories

	ANT-104-02	0 dBi 400 MHz External Antenna
	3S001-1	RG58A/U 1 Meter Long RP-SMA male to RP-SMA Female