



## Features

- ISM 2.4 GHz Operating Frequency
- Direct Sequence Spread Spectrum (DSSS) RF technology
- Wireless Transmission Range up to 700 m (Default)
- RS-232/RS-485 Interface Supported
- Half-duplex communication up to 115200 bps
- Full-duplex communication up to 57600 bps
- Fully External Switch for the Hardware Configuration
- Surge and ESD Protection
- DIN-Rail Mountable



## Introduction

The RFU-2400 is a 2.4 GHz radio frequency modem that also provides RS-232 and RS-485 port interfaces. It is designed to act as a wireless bridge that converts a signal between serial and wireless formats, and is useful for applications where it is inconvenient to install physical wiring. The RFU-2400 makes it easy to establish a low cost environment for data acquisition and control applications between a host and a range of remote sensors via wireless communication.

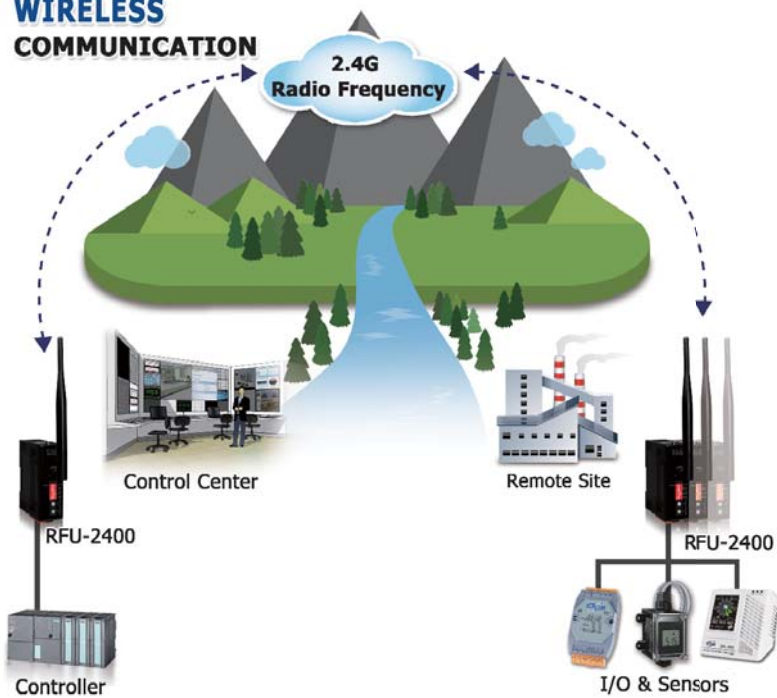
The RFU-2400 is a spread spectrum radio frequency (RF) modem based on the IEEE 802.15.4 standard. The IEEE 802.15.4 standard is operating on the ISM bands using a transmission frequency range of between 2405 and 2480 MHz that is separated into 5 MHz segments, thereby providing 16 channels. Two operating modes are also supported, including Peer-to-Peer (P2P) mode, where the distinguishing feature is that it allows full-duplex communication, and Broadcast mode, which allows half-duplex functionality in multi-point communication.

## Specifications

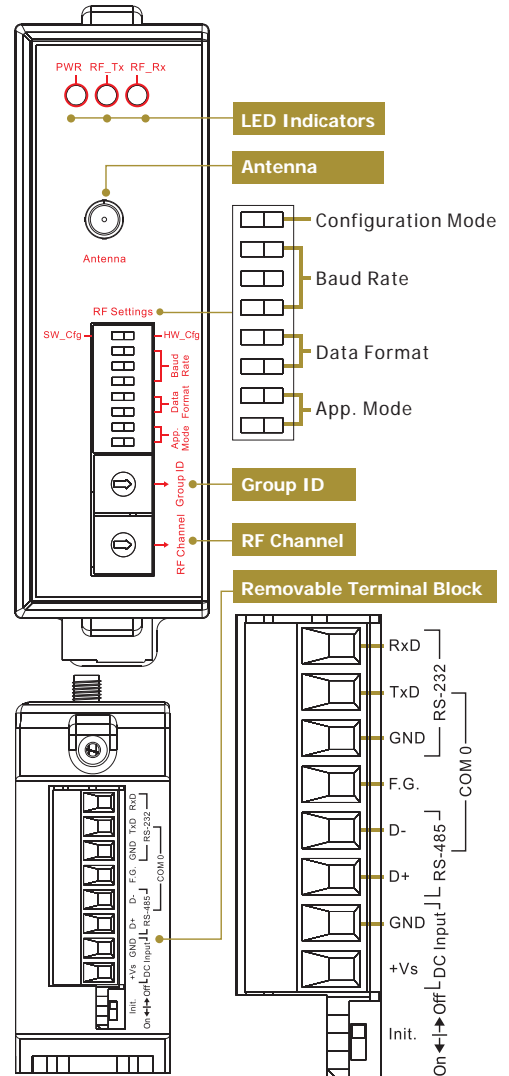
<b>Wireless</b>	<b>Wireless</b>		
	Modulation	OQPSK (Offset Quadrature Phase-shift Keying)	
	Spread Spectrum	DSSS (Direct-Sequence Spread Spectrum)	
	Channels	16	
	Sensitivity	-96 dBm	
	Transmission Power	11 dBm (Default): 19 dBm (Max.)	
	Antenna	2.4G - 5 dBi Omnidirectional Antenna	
	Transmission Range	700 m (Typical)	
<b>Hardware</b>	<b>COMO</b>		
	COM 0	RS-232	TxD, RxD and GND
		RS-485	DATA+, DATA-; Internal ASIC Self-tuner; Non-isolated
	Baud Rate	Full-duplex	2400 to 57600 bps
		Half-duplex	2400 to 115200 bps
	Data Format	N81, O81, E81, N82	
	Buffer	2560 Bytes	
	<b>LED Indicators</b>		
	Green	RF TxD Status	
	Yellow	RF RxD Status	
	Red	Power Status	
	<b>Power</b>		
	EMS Protection	ESD, Surge, EFT and Hi-Pot	
	Required Supply Voltage	+10 VDC ~ +30 VDC	
	Power Consumption	1 W (Max.)	
	Connection	8-pin 5.08 mm Removable Terminal Block	
	<b>Mechanical</b>		
	Casing	Plastic	
	Flammability	UL 94V-0 materials	
	Dimensions (L x W x H)	108 mm x 84 mm x 33 mm	
	Installation	DIN-Rail	
<b>Environment</b>			
Operating Temperature	-25 ~ +75°C		
Storage Temperature	-40 ~ +80°C		
Relative Humidity	0 ~ 90% RH, Non-condensing		

## Applications

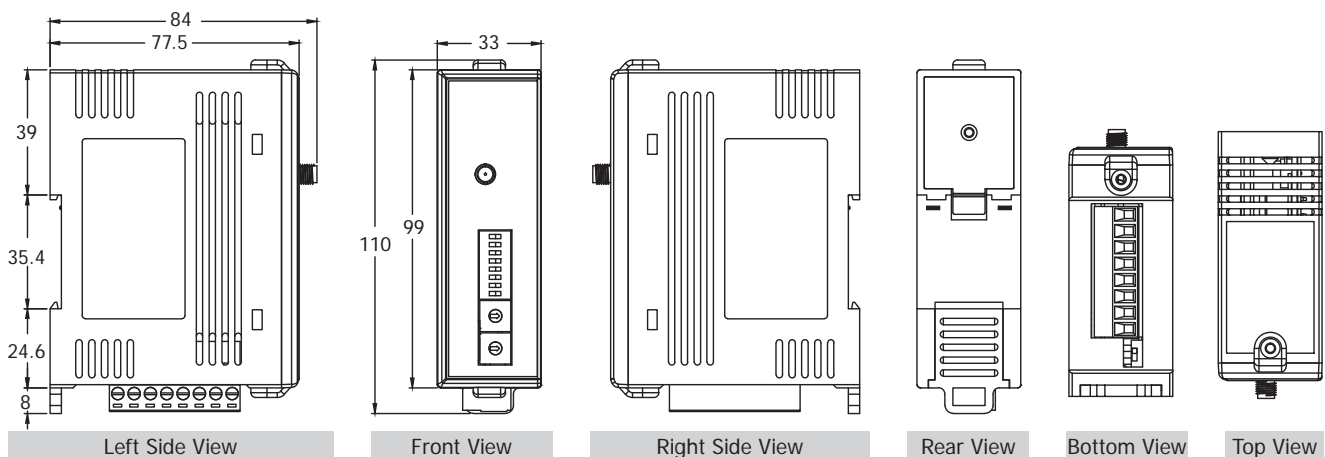
### WIRELESS COMMUNICATION



## Appearance



## Dimensions (Units: mm)



## Ordering Information

RFU-2400 CR	2.4 G RS-232/RS-485 Wireless Modem (RoHS)
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## Accessories

External Antenna	2.4GHz External Antenna, RP SMA Male (Plug)
Extension Cable	3S00 × -1, RG58A/U × Meter Long RP-SMA male to RP-SMA Female