

RFU-2400

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.

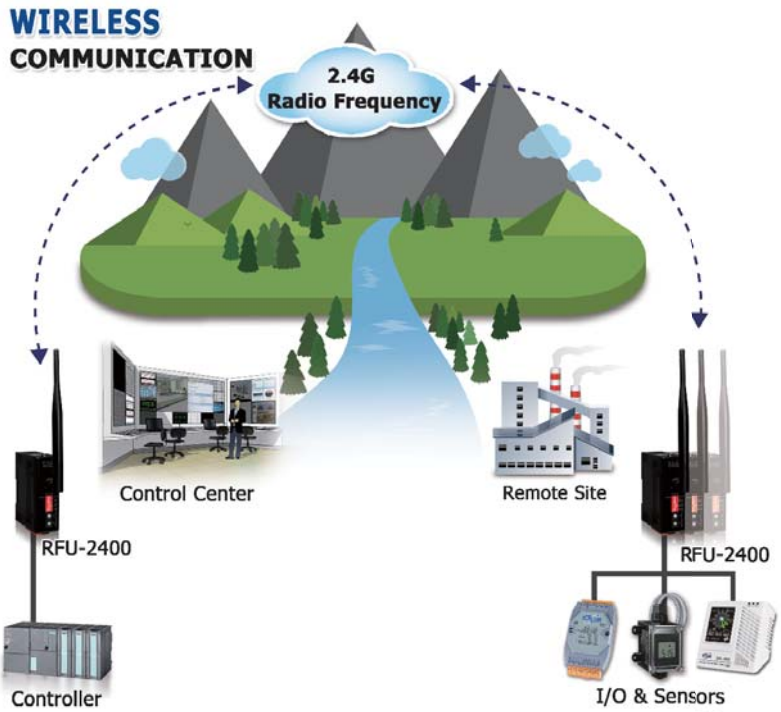
The RFU-2400 is a spread spectrum radio frequency (RF) modem based on the IEEE 802.15.4 standard. The IEEE 802.15.4 standard is operating on the ISM bands using a transmission frequency range of between 2405 and 2480 MHz that is separated into 5 MHz segments, thereby providing 16 channels. Two operating 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

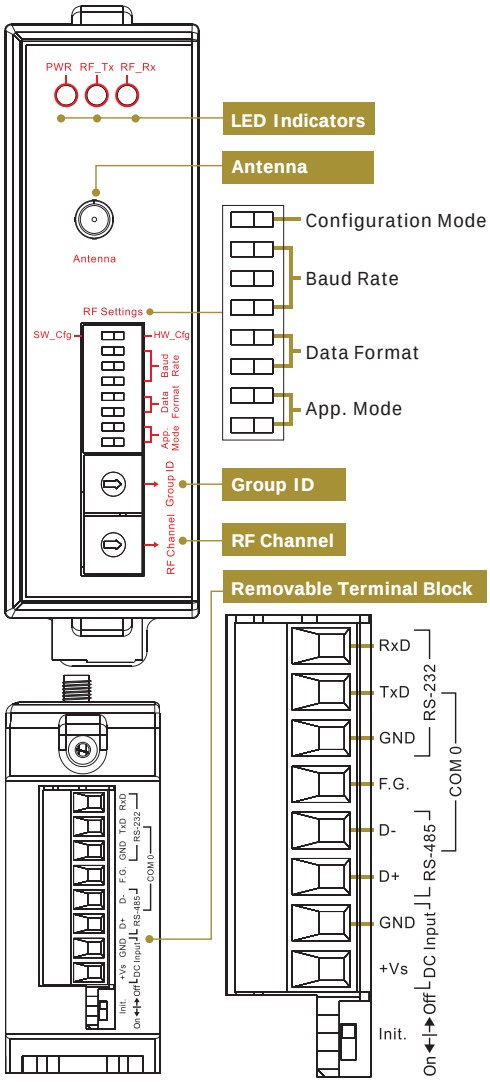
Wireless	**Wireless**		
	Modulation		OQPSK (Offset Quadrature Phase-shift Keying)
	Spread Spectrum		DSSS (Direct-Sequence Spread Spectrum)
	Channels		16
	Sensitivity		-96 dBm
	Transmission Power		11 dBm (Default): 19 dBm (Max.)
	Antenna		2.4G - 5 dBi Omnidirectional Antenna
	Transmission Range		700 m (Typical)
Hardware	**COM0**		
	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
	LED Indicators		
	Green		RF TxD Status
	Yellow		RF RxD Status
	Red		Power Status
	Power		
	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
	Mechanical		
	Casing		Plastic
	Flammability		UL 94V-0 materials
	Dimensions (L x W x H)		108 mm x 84 mm x 33 mm
	Installation		DIN-Rail
	Environment		
	Operating Temperature		-25 ~ +75°C
	Storage Temperature		-40 ~ +80°C
	Relative Humidity		0 ~ 90% RH, Non-condensing

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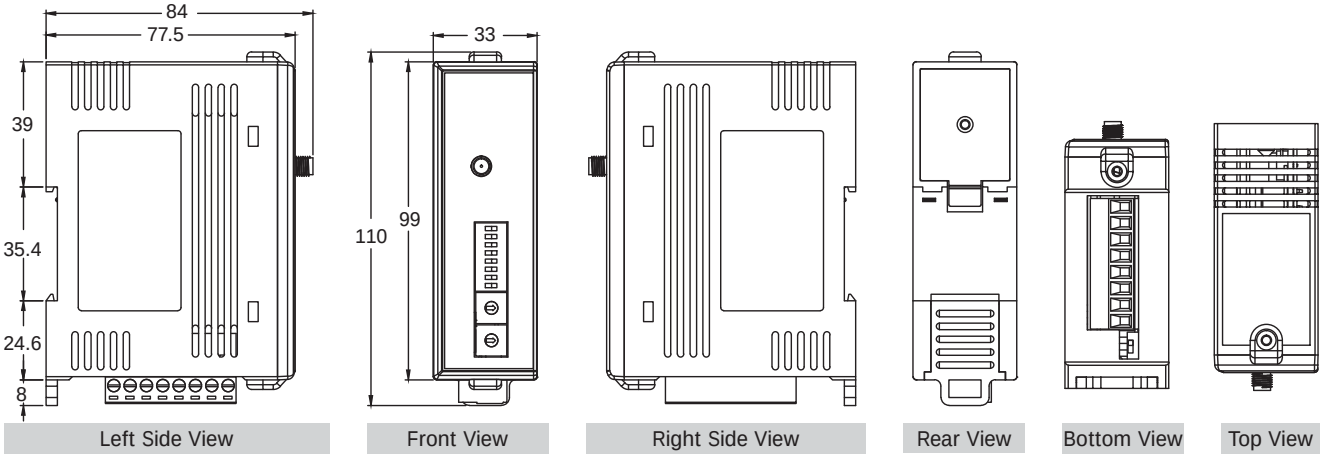
Applications



Appearance



Dimensions (Units: mm)



Left Side View | Front View | Right Side View | Rear View | Bottom View | Top View

Ordering Information

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

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

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