

tRFU-2400

Features

- ISM 2.4 GHz Operating Frequency
- Direct Sequence Spread Spectrum (DSSS) RF technology
- RS-232/RS-485/RS-422 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 tRFU-2400 is a 2.4 GHz radio frequency modem that also provides RS-232, RS-485 and RS-422 port interfaces. The tRFU-2400 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 tRFU-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.

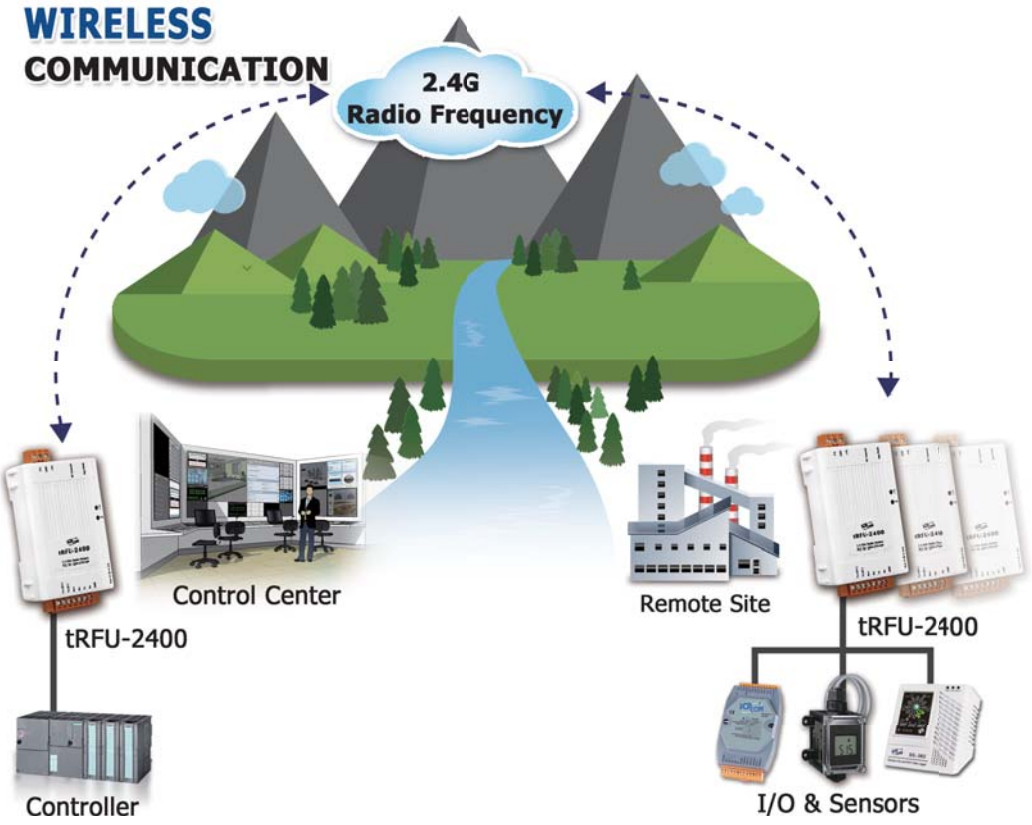
The tRFU-2400 is a spread spectrum radio frequency (RF) modem based on the IEEE 802.15.4 standard. The IEEE 802.15.4 standard is operating on the ISM bands using a transmission frequency range of between 2405 and 2480 MHz that is separated into 5 MHz segments, thereby providing 16 channels. Two operating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

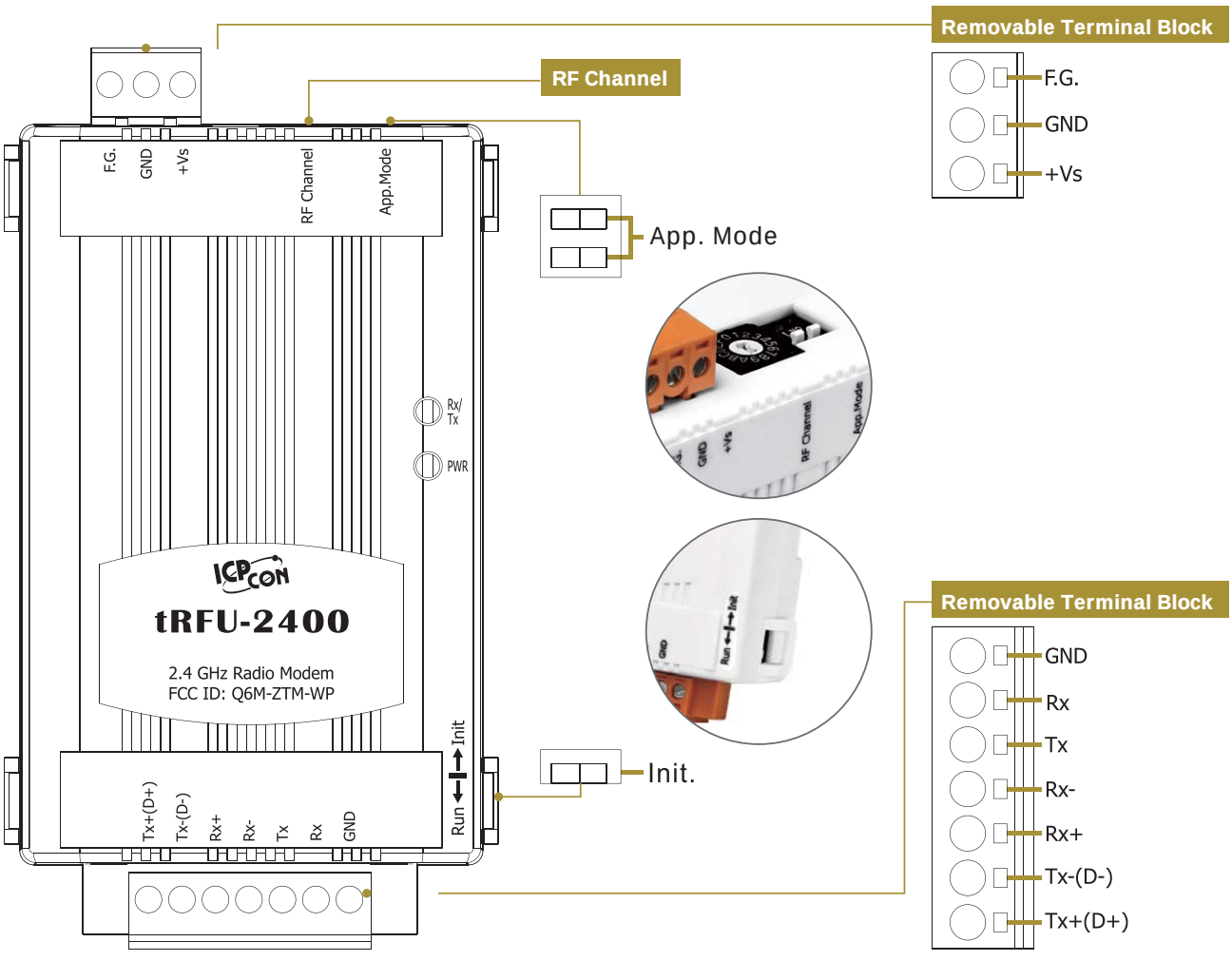
Model Name			tRFU-2400
Wireless			
Wireless	Modulation		OQPSK (Offset Quadrature Phase-shift Keying)
	Spread Spectrum		DSSS (Direct-Sequence Spread Spectrum)
	Channels		16
	Sensitivity		-97 dBm
	Transmission Power		11 dBm (Default), 17 dBm (Max.)
	Antenna		3 dBi PCB Antenna
	Transmission Range		180 m (Typical)
Hardware			
COM0	COM 0	RS-232	TxD, RxD and GND
		RS-485	DATA+, DATA-; Internal ASIC Self-tuner; Non-isolated
		RS-422	TxD+, TxD-, RxD+, RxD
	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		Rx/Tx
	Yellow		Power State
Power	EMS Protection		ESD, Surge, EFT and Hi-Pot
	Required Supply Voltage		+10 VDC ~ +30 VDC
	Power Consumption		0.4 W (Max.)
Mechanical	Casing		Plastic
	Flammability		UL 94V-0 materials
	Dimensions (W × L × H)		52 mm x 95 mm x 27 mm
	Installation		DIN-Rail
Environmental	Operating Temperature		-25 to +75°C
	Storage Temperature		-40 to +80°C
	Relative Humidity		0 to 90% RH, Non-condensing

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Applications

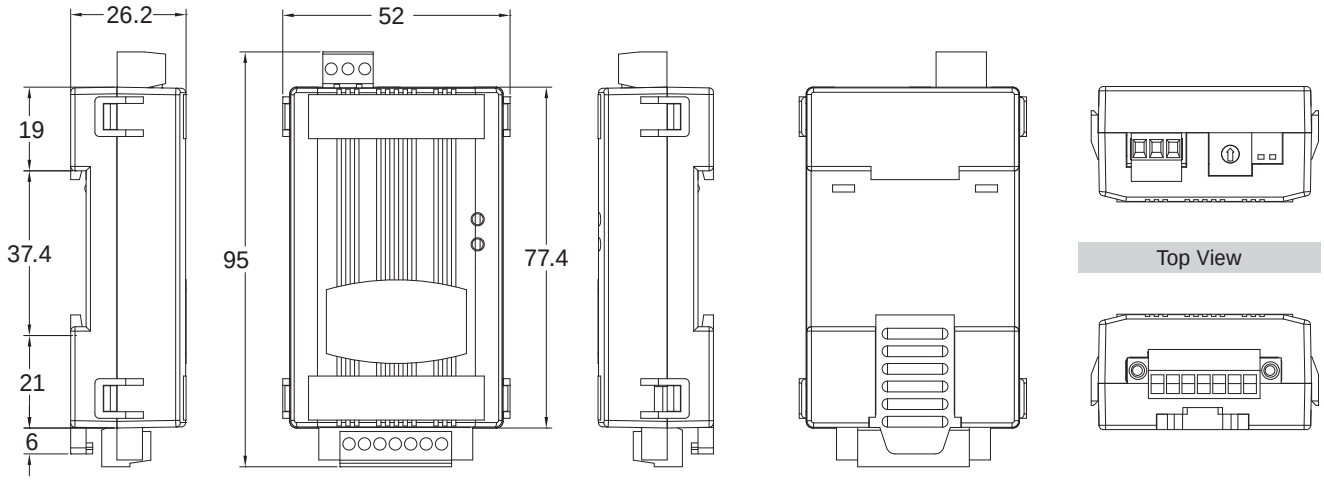


Appearance



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Dimensions (Units: mm)



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

Ordering Information

tRFU-2400 CR	2.4 G RS-232/RS-485/RS-422 Wireless Modem (RoHS)

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