

2635A-RF900USB

900 MHz RF USB Modem

Instruction Sheet

Introduction

The 2635A-RF900USB 900 MHz RF USB Modem (referred to as “the Modem”) is a radio-frequency transceiver that, used together with the 2635A-RF900 Serial RS-232 Modem, creates a wireless link between Fluke Hydra Series Data Loggers and a computer (PC) running Hydra application software.

Note

The modem operates in the 900 MHz frequency range and is approved by the FCC for use in the United States. Operation in other countries may violate local regulations. When operating outside the United States, check with the appropriate governing agency in the host country prior to Modem operation.

This instruction sheet assumes familiarity with the Hydra software and Hydra Series Data Logger operation. If unfamiliar with Hydra software or the Hydra Series hardware, refer to the software user’s documentation or the appropriate Hydra Series Users manual. The Modem is shown in Figure 1.

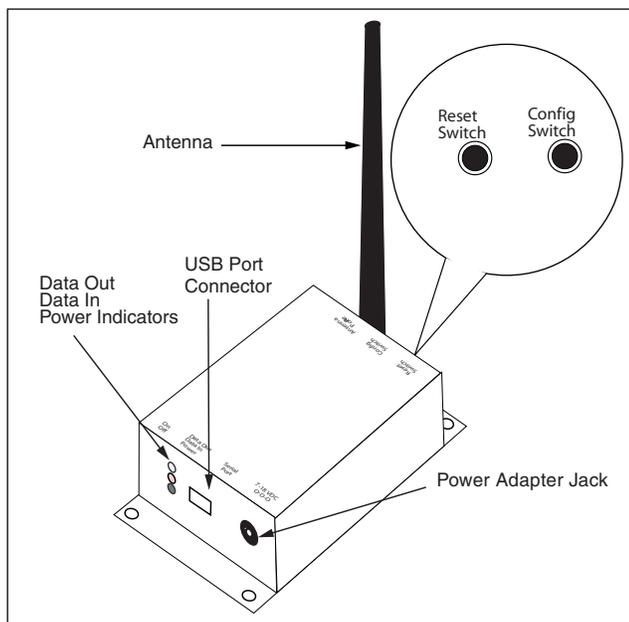


Figure 1. 2635A-RF900USB 900 MHz RF USB Modem

Contacting Fluke

To locate an authorized service center, visit us on the World Wide Web at www.fluke.com or call Fluke using any of the following numbers:

USA: 1-888-99-FLUKE (1-888-993-5853)
Canada: 1-800-36-FLUKE (1-800-363-5853)
Europe: +31 402-678-200
Japan: +81-3-3434-0181
Singapore: +65-738-5655
Anywhere in the world: +1-425-446-5500

Shipping Contents

The Modem comes with the following items:

- Instructions for use with the Hydra Series (this sheet)
- Quick Start Guide
- CD-ROM with documentation and software
- ½ wave Dipole Antenna
- USB (Universal Serial Bus) 6 ft. cable

Requirements

The Modem requires a PC with one free USB port and Windows XP, 2000, or 98 SE.

Installation

Each wireless system requires two modems – one base station connected to a PC, and one remote station connected to a Hydra Data Logger. This USB Modem is used as a base station connected to the PC; the remote station connected to the Hydra is a 2635A-RF900 Serial RS-232 Modem.

To ease system setup, the Modem’s factory default settings are correct for proper PC-to-Hydra operation without further adjustments. There are no setup differences between the base and remote stations.

Base Station Modem

The Modem is connected to the PC as the base station. To set up this modem:

1. Connect the Modem to a free USB port on the PC using the supplied USB cable.
2. The Windows “Found New Hardware Wizard” will appear on the PC. Click the “Next” button to start the driver installation.
3. Depending on the version of Windows, select either the “Install from a specific list or location” or “Search for a suitable driver” option, then click “Next”.
4. Verify the MaxStream CD is inserted. Check “Search removable media (CD-ROM...)” or “CD-ROM drives” box, and then click the “Next” button.
5. If a “Windows Logo Testing” alert box pops up, click “Continue Anyway”.
6. Click the “Next” button again if necessary to accept the selected driver.
7. Click the “Finish” button.
8. Repeat steps 2 through 7 to install the next driver.
9. Connect the supplied antenna to the Modem.

Remote Station

Set up a 2635A-RF900 Serial RS-232 Modem and connect to the Hydra Data Logger as described in its own instruction sheet.

Operation

Start the Hydra software and turn the Hydra Data Logger power on.

Connect through the Hydra software as if using a standard RS-232 connection. Basic line-of-site range is approximately 1500 ft. (450 m). The range varies with antenna height.

The Modem will operate in its default factory setting as an accessory to the Hydra Series. Refer to the manufacturer’s instructions and supplied software for operating the Modem in other applications.

To reset the Modem to its factory settings, push the Reset Switch located on the Antenna-side of the Modem.

Specifications

Performance

Indoor/Urban Range:	Up to 1500 ft (450 m)
Outdoor LOS Range:	Up to 7 miles (11 km) w/ dipole antenna
Serial Data Throughput:	9600 bps
RF Baud Rate:	10,000 bps
Transmit Power Output:	140 mW (21.5 dBm)
Receiver Sensitivity:	-110 dBm

General

Frequency:	902-928 MHz
Spread Spectrum:	Frequency Hopping, Wide band FM modulator
Network Topology:	Peer-to-Peer, Point-to-multipoint, Point-to-Point, Multi-drop
Channel Capacity:	7 hop sequences share 25 frequencies
Serial Data Interface:	USB
I/O Data Rate:	Software selectable 1200 - 57600 bps

Power Requirements

Supply Voltage:	USB bus-powered or 5-12 V dc external
Transmit Current:	215 mA
Receive Current:	85 mA

Physical Properties

Enclosure:	7.1 oz (200 g), extruded aluminum, black anodized
Enclosure Size:	2.75 in x 5.50 in x 1.124 in (7.90 cm x 13.90 cm x 3.80 cm)
Operating Temperature:	0 to 70 °C (commercial)

Antenna

Type:	½ wave dipole whip, 6.75 in (17.1 cm), 2.1 dBi Gain
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LIMITED WARRANTY AND LIMITATION OF LIABILITY

This Fluke product will be free from defects in material and workmanship for 90 days from the date of purchase. This warranty does not cover fuses, disposable batteries, or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Fluke’s behalf. To obtain service during the warranty period, contact your nearest Fluke authorized service center to obtain return authorization information, then send the product to that Service Center with a description of the problem.

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