

# 2635A-RF900

## 900 MHz RF Serial Modem

### Instruction Sheet

### Introduction

The 2635A-RF900 MHz RF Serial Modem (hereafter referred to as “the Modem”) is a radio frequency transceiver that creates a wireless link between Fluke Hydra Series Data Loggers and a computer (PC) running Hydra Logger 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 local governing agency prior to Modem operation.*

This instruction sheet assumes familiarity with the Hydra Logger software. If unfamiliar with Hydra Logger software, refer to the software’s user documentation.

### Box Contents

The Modem comes with the following items:

- Instructions for use with Hydra Logger (this sheet)
- Quick Start Guide
- CD with documentation and software
- ½ wave dipole antenna
- Serial loopback adapter
- Null modem adapter (male-to-male)
- Male RS-485/422 adapter
- Female RS-485/422 adapter
- RS232 DB-9 male to RS232 DB-9 female serial cable
- AC power adapter
- 9 V battery adapter

Some items listed are not used with the Hydra Logger and are not explained in this instruction sheet. Please refer to the CD for that information.

### Installation

Each operating system requires two modems. One base station connected to a PC, and one remote station

connected to a Hydra Data Logger. 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.

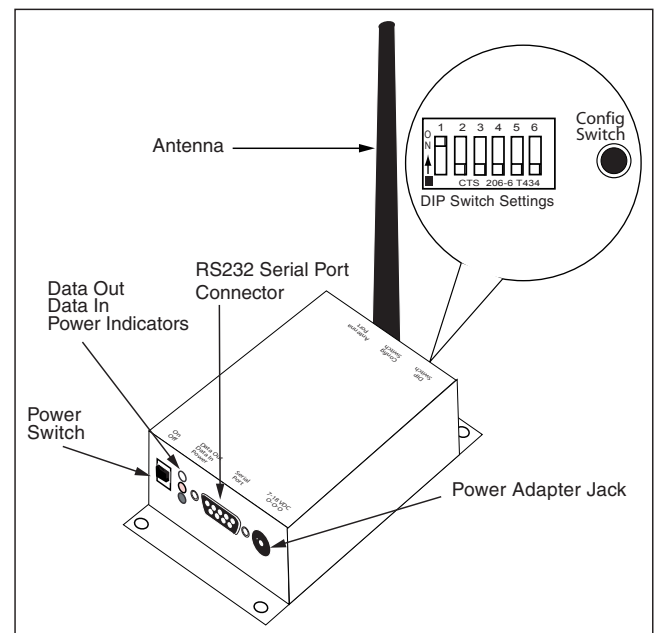
### DIP Switch Settings

Ensure the DIP switch settings on both remote and base Modems are set as in Figure 1. For a detailed explanation of DIP switch settings, see the figure on the bottom of each Modem.

### Connecting the Base Station

The base station is connected to the PC. To set up a base station:

1. Connect one of the Modems to a free PC serial port using either of the supplied RS232 cables.
2. Connect the power supply module, or equivalent 8 to 18 V dc from a battery, to the power adapter jack on the modem.
3. Attach the supplied antenna to the Modem’s antenna port.
4. Turn the power switch to “ON”.



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### **Connecting the Remote Station**

The remote station is connected to the Hydra Data Logger. To set up a remote station:

1. Connect the other modem to the Hydra's RS232 port using the supplied RS232 cable.
2. Connect the power supply module, or equivalent 8 to 18 V dc from a battery, or supplied 9 V battery connector to the power adapter jack on the Modem.
3. Attach the supplied antenna to the Modem's antenna port.
4. Turn the power switch to "ON".

### **Operation**

Start Hydra Logger software and the Hydra Data Logger.

Connect through Hydra Logger software as if using a standard RS232 connection. The basic line-of-site range is approximately 2000 ft. (610 meters). The range varies with antenna height.

The Modem has been set to operate in its default factory setting as an accessory to the Hydra Data Logger family. Please refer to the manufacturer's instructions and supplied software for operating the unit in other applications.

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

### **Specifications**

#### **Performance**

Indoor/Urban Range	Up to 1500 ft. (450 m)
Outdoor LOS Range	Up to 7 miles (11 km) with dipole antenna

Transmit Power Output	100 mW (20 dBm)
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#### **General**

Frequency	902-928 MHz
Spread Spectrum	Frequency-hopping, wide band FM modulator
Channel Capacity	7 hop sequences share 25 frequencies

#### **Power Requirements**

Supply Voltage	8-18 V dc
Transmit Current	200 mA
Receive Current	70 mA

### **Antenna**

Type	½ wave dipole whip, 6.75 in. (17.1 cm), 2.1 dBi Gain
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Not licensed for operation outside of the United States.

### **Contacting Fluke**

To order accessories, receive operating assistance, or locate the nearest Fluke distributor or Service Center, call:

To contact Fluke or for service, call one of the following telephone numbers:

USA: 1-888-44-FLUKE (1-888-443-5853)  
Canada: 1-800-36-FLUKE (1-800-363-5853)  
Europe: +31 402-675-200  
Japan: +81-3-3434-0181  
Singapore: +65-738-5655  
Anywhere in the world: +1-425-446-5500  
Or, visit Fluke's Web site at [www.fluke.com](http://www.fluke.com).

#### **LIMITED WARRANTY AND LIMITATION OF LIABILITY**

This Fluke product will be free from defects in material and workmanship for one year 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.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

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