



# RF Field Modem - XT (900 MHz)

## Reliable, Easy-to-use Serial Cable Replacement

Ad Hoc Electronics' 900 MHz Field Modem and Blue Modem are self-contained radio modems that can be battery or externally powered. The modems were engineered to provide the optimal combination of battery life and transmit power.



### RELIABLE RANGE

- Long Range Data Integrity -- up to 30 miles (@500 mW)
- -110 dBm Receiver Sensitivity (@9600 bps)
- ISM 900 MHz Operating Frequency

### EASY-TO-USE

- Simple Configuration
- Compatible with Digi 9XTend networks
- Low-power options

**The Field Modem can operate for days on a pair of AA batteries**  
(w/ Sleep Mode enabled)

### BLUE MODEM™    FIELD MODEM™



Interface

RS-232 Interface

### NETWORK DIAGRAM

#### Sample Field Modem Application

- RS-232 or Bluetooth device connects to Field Modems via their serial/Bluetooth ports.
- RF signals are sent and received between devices.

**Instant Gratification!** The modems come configured to provide reliable out-of-box wireless communications.

#### Basic Point-to-point RF Link



Multipoint, Peer-to-peer & Mesh Networks also Supported

### SPECIFICATIONS

Range (500mW RF power output)	up to 30 miles (RF line-of-sight) up to 2200' (indoor/urban)
Operating Frequency	902-928 MHz (FHSS, Frequency Hopping Spread Spectrum)
Receiver Sensitivity	-110 dBm (9600 bps data rate) -100 dBm (115.2 kbps data rate)
Transmit Power	1mW - 500mW
Power Supply	Internal batteries 2xL91 (AA) or External 8-30 VDC, manually switched
Interface	RS-232 (RJ-45 connector) or Bluetooth
Interface Data Rate	up to 230.4 kbps (user-settable)
Encryption	256-bit AES (FIPS-197 certified)
Dimensions	5.48" x 3.26" x 1.06" 139mm (L) x 83mm (W) x 27mm (H)
Ambient temperature*	-20° to +55°C (preliminary)
Storage temperature*	-40° to +85°C (preliminary)
Certifications (Field Modem) (Bluetooth interface)	FCC: OUR-9XTEND, IC: 4214A-9XTEND FCC: T9J-RN41, IC: 6514A-RN41, Bluetooth SIG listing: B013180

### SAMPLE APPLICATIONS



The Field Modem was engineered to provide system integrators the ability to add battery-powered nodes to wireless data networks.

- Data Acquisition
- Remote Monitoring
- Environmental Controls
- Private Networks
- Mobile Terminals

### For Reliable Radio Modems & Dedicated Technical Support

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\* Note: Battery life adversely affected by temperature extremes