

# RF Wireless Solutions

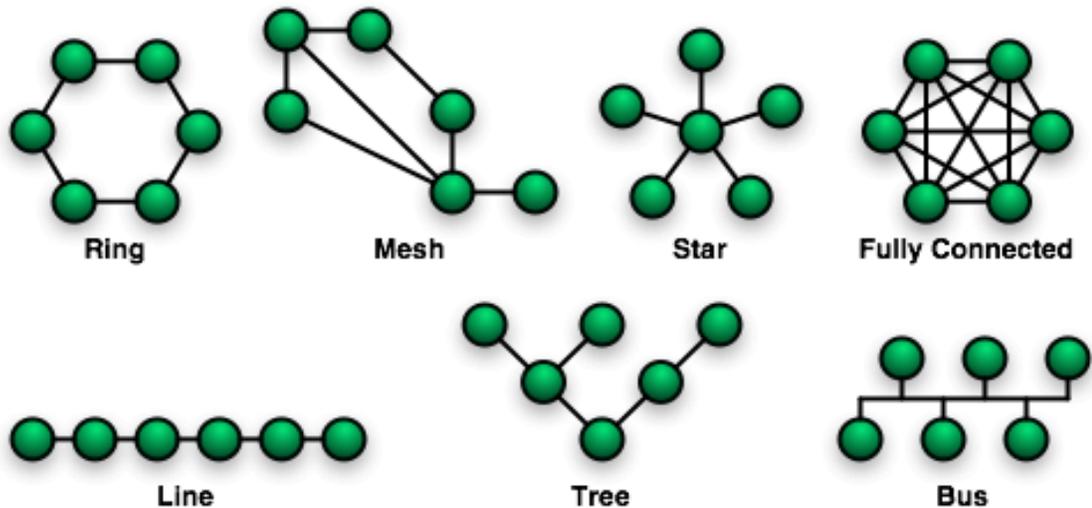
## RFW-900MESH Wireless Modem

**Stand-Alone Radio Modem capable of Point to Point, Point to Multipoint, Star, Ad-hoc & MESH**



The **RFW-900MESH** is a 900MHz module that makes your serial data links wireless. With no configuration required, this module is simply plug and play. It utilizes a 256-bit AES encryption with a FIPS-197 approved AES algorithm which provides additional security to the data being transferred. The **RFW-900MESH** module is an inexpensive solution to lengthy data transmission distances.

The **RFW-900MESH** facilitates quicker and easier installations and opens up an array of possibilities for remote monitoring and access control applications including a robust SELF HEALING Wireless Mesh Network.



Available from: **cramZ marketing services, Inc.** email: [sales@cramzmarketing.com](mailto:sales@cramzmarketing.com) ph. (770) 529-1040





# **RFW-900MESH Wireless Modem**

**Remote Sign and Gate Control  
Building Controls and Automation  
SCADA (Supervisory Control & Data Acquisition)  
256-bit AES Encryption - Meets FIPS-197 specs**

## **How the RF-900MESH works:**

The modem encrypts the serial data to FIPS-197 specifications, transmits that data wirelessly to the “home” end of the data link, where the data is unencrypted.

## **Data Security:**

Each RFW-900MESH module comes with built-in 256-bit AES encryption using an algorithm that is FIPS-197 (Federal Information Processing Standards) certified. Additionally, the radio utilizes FHSS (Frequency Hopping Spread Spectrum) – 10 sequences over 50 channels, to avoid RF interference.

Modulation = FSK (Freq. Shift Keying)

## **Communications:**

RS232/485 Data via Peer to Peer, Point to Multi-Point, Star, Ad-hoc or Mesh networks.

Frequency – 902-928 MHz (ISM band)

RF Data Rate – 10,000 bps/125,000 bps

Transmit Power – 1 mW – 1W (selectable)

Indoor Range – 1,000 ft. w/2.1 db dipole ant.

Outdoor Range – 7 miles w/2.1 db dipole ant.

Ranges are LOS – Fresnel zone rule apply

## **Electrical:**

Primary Power: 7-28 VDC

Current Draw: 70 mA – 170 mA

Operating Temperature: -40° to 85° C  
-40° to 185° F

## **Antenna Separation:**

Minimum separation distance between antennas during normal operation at 1W transmit power is 7 feet (3 ft @ 500 mW)

## **Module Physical Size:**

2.75 x 5.5 x 1.125 inches

Antenna (swivel, 2.1 db dipole) 6.5 inches

## **FCC:**

FCC ID = OUR-9XTEND

This device complies with Part15 of the FCC rules. Operation is subject to the two following conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.