



## Data Transmitter Radio

S90010

This modem can be configured in minutes to provide low-cost serial cable replacement between all types of electronic devices. 900 MHz model provides transmission ranges of up to 20 miles in a low-cost wireless solution. The modems are coupled with a DIP-switchable RS-232/422/485 interface board and regularly outperform more expensive RF modems.





## Technical Specifications

S90010

### Performance

**Indoor/Urban range (w/ 2.1 dB dipole antenna):** Up to 1500 feet (450 m) @ 900 MHz

**Outdoor RF line-of-sight range (w/ 2.1 dB dipole antenna):** Up to 7 mi (11 km) @ 900 MHz

**Outdoor RF line-of-sight range (w/ high gain antenna):** Up to 20 mi (32 km) @ 900 MHz

**Transmit power output:** 100 mW (20 dBm) @ 900 MHz

**Receiver sensitivity:** 900MHz: -110 dBm (@9,600 bps throughput data rate), -107 dBm (@19,200 bps)

**Interface data rate (software selectable):** 10 - 57600 bps (including non-standard baud rates)

**Throughput data rate:** 9,600 or 19,200 bps

**RF data rate:** 10,000 bps (@9,600 bps throughput data rate) or 20,000 bps (@19,200 bps)

### Power Requirements

**Power supply voltage:** 7 - 18V

**Receive current:** 70 mA @ 900 MHz

**Transmit current:** 170 mA @ 900 MHz

**Power Down Current:** < 1 mA

### Networking and Security

**Frequency:** ISM 902 - 928 MHz

**Spread Spectrum:** FHSS (Frequency Hopping Spread Spectrum)

**Modulation:** FSK (Frequency Shift Keying)

**Supported network topologies:** Peer-to-peer (no master/slave dependencies), point-to-point, point-to-multipoint and multidrop

**Channel capacity (software selectable):** 7 hopping sequences

**Network filtration layers:** VID, Hopping Channel & Destination Address

### Certifications:

**FCC ID (U.S. Certification Part 15.247):** OUR9XSTREAM (900 MHz)

**IC ID (Canada) :** 4214A-9XSTREAM (900 MHz)