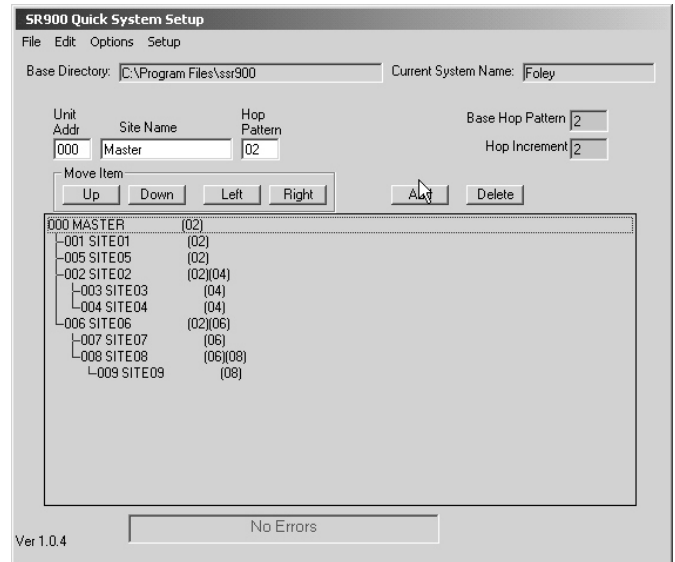


SR900 Spread Spectrum Telemetry Radio Frequency Hopping 902-928 MHz Transceiver



The SR900 is a reliable, wireless interface for most serial applications. The RF performance allows line of sight communications at distances over 15 miles. Non-line-of sight communications is also possible in many applications.



Software includes "quick" system configurator

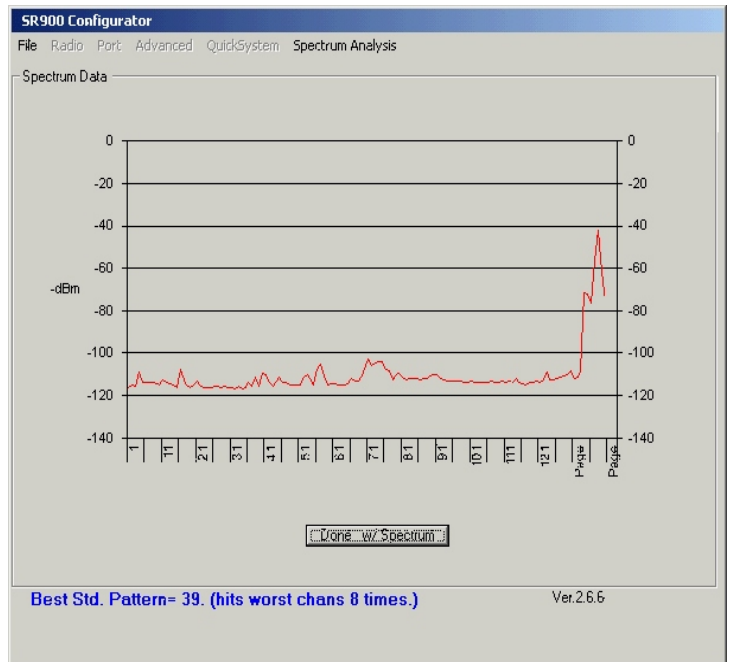
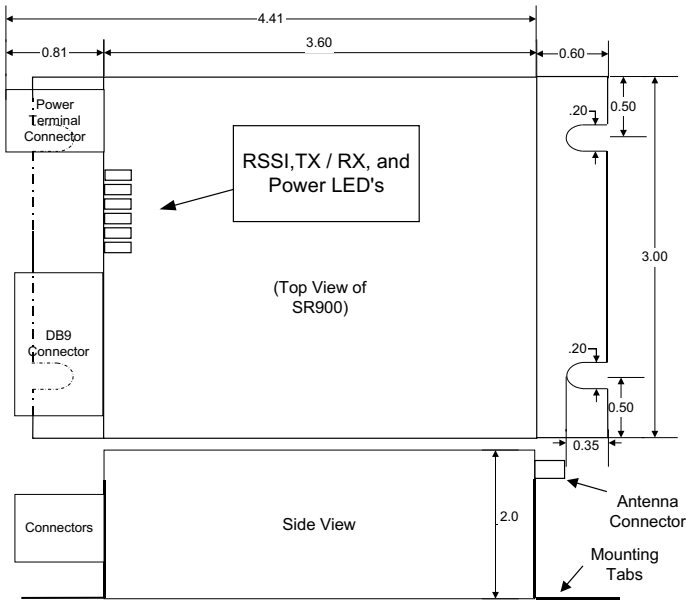
SR900 Features

- Point-to-point and point-to-multipoint operations
- Field configurable as master or slave, or repeater
- Built-in repeater capabilities
- Repeater can also function as slave with local RTU
- Configuration software free with purchase
- Software includes spectrum analysis utility
- Quick network configuration utility included
- Power requirement of 12-24 VDC
- Small "footprint" ideal for panel mounting
- Transparent operation with most protocols
- Maximum legal transmit power - 1 Watt
- Programmable selection of channels
- Operates in license free band ISM band
- Remote diagnostics and programming capability
- Encryption maximizes security and privacy
- 60 user-selectable psuedo-random hopping patterns
- Built-in CRC-16 error detection and auto-retransmit to provide accurate and reliable data
- Remote diagnostics and configuration capability

- **The standard has been raised for performance, reliability and cost effectiveness.** The SR900 is not only cost effective but it has the maximum allowable transmit power, enhanced interference avoidance, up to 83K bps throughput
- **The latest generation of industrial license-free radios...** The SR900 was designed and developed specifically for telemetry and SCADA applications. It is easy to setup using Windows based configuration utility. Special[®] features include spectrum analysis and remote diagnostics & setup.
- **The SR900 has a built-in RTU option available -The TSR900.** Features 5DI, 2DO and 2AI
See separate data sheet for **TSR900**.

**Rugged, Reliable, Adaptable
Telemetry Products**

Nota Bene Technology SR900 - Technical Specifications



Spectrum analysis utility included with the software

Transmitter and Receiver Details

Operating Freq. 902-928MHz
 System 137 dB
 Sensitivity -107 dBm
 Output Power 1mW to 1 W (User-Configurable)
 Min. Signal for Synchronization: -110dB
 Hopping Pattern 62 pseudo-random, user selectable
 Freq. Stability $\pm 2.5\text{ppm} \pm .00015\%$
 TX Keying Data Activated

Transmitter

Output impedance 50 ohms
 Spurious Emissions , <60 dBa
 Harmonic Emissions , <60 dBa
 Power Output 1mW, 10mW, 100mW, 1W selectable

Receiver

Intermodulation 75dB minimum
 Adjacent Channel Rejection >50dB
 Desensitization 60dB in band, 70dB out of band
 In Band Rejection >60dB Out of Band >70dB

Primary Power

Transmitter Supply Current 1mW=193mA, 10mW=212mA, 100mW=294mA, 1W=542mA
 Receive Supply Current 194mA
 Power Requirements 12-24VDC @ maximum of 542mA (see TX & RX specification above)
 Reverse Polarity Protection Diode across primary power input

General

Approvals	FCC and Industry Canada
RS232 Baud range	2400-115,000 Baud
Handshaking options	RTS-CTS, DSR, DTR, CD
LED Indicators	CD, RXMode, TXMODE, RSSI
Range	Up to 19 Miles (30 Km)
Memory	Nonvolatile configuration memory
Operating Modes	Point-to-point, Point-to-multipoint
Power Requirements	12-24VDC @ maximum of 542mA
Error Detection	CRC-16 with auto-retransmit
Data Latency	25 - 50mS

Environmental

Dimensions(WxDxH)	3" x 4.8" x 2"
Weight	Approx. 11 ounces
Operating Environment	-40 to +65C; Humidity 5-95% Non-condensing

NBT



Nota Bene Technology, Inc.

19900 County Road 81
 Maple Grove, MN 55311
 (952) 928-8872
 (800) 892-5303
 (952) 928-8874 (FAX)