PULSE S

THE PULSE S WIRELESS MODEM DELIVERS

The Pulse S is a powerful radio modem that provides RS-232 connectivity to a wide variety of traffic control devices. The PULSE system is easy to install, maintenance free and will provide years of reliable connectivity throughout your city or town.

At the heart of the Pulse S is a powerful 1 Watt 900 MHz Frequency Hopping radio that delivers reliable NLOS (non line of sight) data communications at ranges up to 20 miles. Built-in repeater functionality could extend the range beyond 60 miles.

The Pulse S is simple to install. Key features include: built in USB 2.0 interface, small form factor, low power consumption and designed for the elements.

One notable feature about the Pulse S is the extremely low power consumption. You can minimize solar powered site costs with this powerful wireless communication option.

The Pulse S is compatible with all other Pulse series radios allowing wireless network configurations that may include a mixture of RS-232 and FSK communications. Combine different products to obtain the most value from the wireless network.

Point-to-Multipoint applications include:

Traffic Controller Interconnect
Vehicle Detector Communications
Water/Wastewater management systems
Industrial SCADA Networks

FEATURES

• Plug and play with all traffic controllers
• Simplified Programming through USB port
• Extremely low power consumption
• Up to 20 Mile Range (with L.O.S.)
• Built-in Store & Forward Repeater Extends Range
• 902 – 928 MHz operating frequency
• Full 1 Watt Transmitter
• Up to 115kbps Sustained Data Throughput
• -40 to 176F (-40 to 80C) Temperature range
• High Performance Receiver: -110 dBm sensitivity
• PULSE LINK configuration software includes:
     -Spectrum Analyzer, Signal Level Monitor, Poll Testing
     -Compatible with all Pulse products

SERIAL

encom
WIRELESS
DATA SOLUTIONS
www.encomwireless.com

Radio Specifications

Technology	Frequency-hopping spread spectrum (FHSS)
	Operating Mode Transceiver, Master / Repeater
Remote System Configurations	Point-to-Point, Point-to-Multipoint, Peer-to-Peer
Frequency	Range 902-928 MHz, ISM Band
Available Hop Patterns	64
Number of RF Channels	128
RF Channel Spacing	200kHz
Output Power	1mW, 10mW, 100mW, 1000mW
Receiver Sensitivity	-110dBm @ 10-6 BER
Error Checking	32-bit CRC, ARQ
Encryption	32-bit
Certification	FCC, Industry Canada

Operating Specifications

Operating	-40 to 176F (-40 to 80C)
Environment Humidity	0 to 95% non-condensing

Interface Specifications

Antenna Port	RP TNC-F
Programming Port	USB, Mini B

Indicators

Power	Yes
TX Data, RX Data	Yes
RSSI	Yes

Programming Application

Radio Configuration	Yes
Spectrum Analyzer	Yes
Signal Strength	Yes
Poll Test	Yes
Firmware Upgrade	Yes

**ENCOM reserves the right to make changes to specifications of products described in this data sheet at any time without notice.
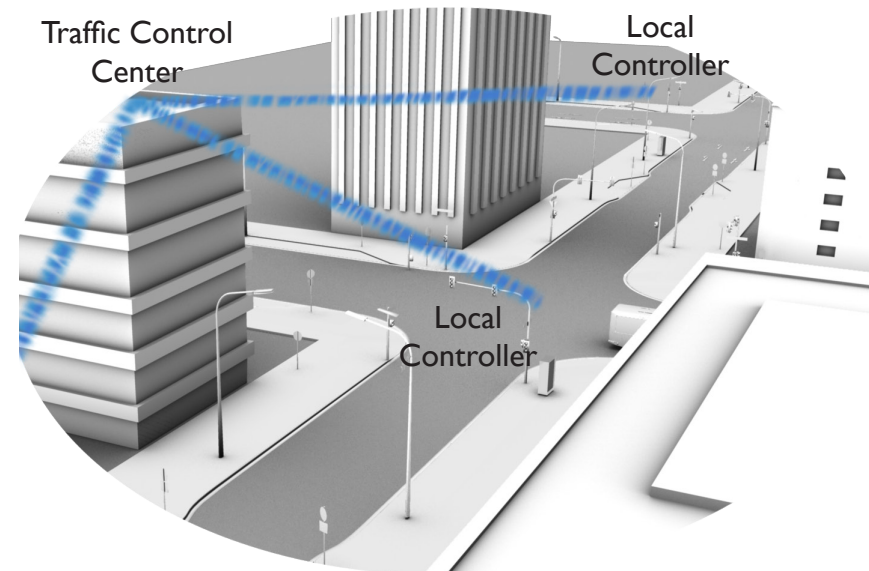
Pulse S

Enclosure	Aluminum, Black Powder Coat
Dimensions	1.5"W x 3.5"H x 4.5"D
Data Interface	RS232 Asynchronous, DB9F
Data Format	Even / Odd / No Parity, 7 or 8 Data Bits
Data Rate	1200 to 115200 Baud
Data Framing	User Selectable, with Programmable ON/OFF Delays
Input Power	6 to 30 VDC
Typical Consumption:	Master 54mA @ 24VDC
	Repeater 55mA @ 24VDC
	Remote 12.5mA @ 24VDC

Traffic Control Center
Local Controller
Local Controller

encom
WIRELESS
DATA SOLUTIONS

...where wireless is simple!