# **ENCOM PULSE S**

RS-232 Radio Modem

# **OVERVIEW**

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

# **EASE OF USE AND RELIABILITY**

At the heart of the Pulse S is a powerful 1 Watt 900 MHz FHSS radio that delivers NLOS (non-line of sight) reliable data communications with ranges of up to 20 miles (LOS). Built-in repeater functionality can extend that ranges even further!

The **Pulse S** is easy to install. Key features include: Built-in USB 2.0 interface, small form factor, low power consumption and its designed for the elements.

A notable feature is its 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 networks that may include a mix of RS-232 and FSK communications. Combine different products to obtain the most value from the wireless network.



PULSE LINK software

# **ENCOM PULSE LINK SOFTWARE**

All configuration is done through the built-in USB 2.0 interface. The modem slot form factor reduces installation requirements and ensures a smooth installation.

Provided free of charge with every Pulse radio is the intuitive Pulse Link software to configure and diagnose your network links quickly and easily. With built-in tools such as Spectrum Analyzer, Signal Level Monitor and Poll Testing maintaining your links is an intuitive task.

Enhanced features include AES 128-Bit encryption as well as low power consumption and a high performance receiver.



#### **KEY FEATURES**

- + Plug-and-Play with all traffic controllers
- + Simplified programming through USB port and Pulse Link
- + Extremely low power comsumption
- + 1 Watt Transmitter
- + AES 128-Bit encryption for enchanced security
- + Up to 20 mile range (LOS)
- + 902-928 MHz operating frequency
- + -40°C to 176° (-40°C to 80°C) operating temperature
- + Built-in Store & Forward Repeater extends range

#### **KEY BENEFITS**

- + Over 28 years of broad industrial wireless experience
- + Unparalleled software management tools
- + Scaleable and future proof technology
- + Unequalled warranty and support programs
- + Easily defined and measurable ROI









PHYSICAL SPECIFICATIONS:				PULSE S   SPECIFICATIONS
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 Rates:	1200 to 115200 Baud			
Data Framing:	User Selectable with Programmable ON/OFF delays			
Input Power:				6 to 30 VDC
Typical Consumption:	Master: 54 mA @ 24VDC / Repeater: 55 mA @ 24VDC / Remote: 12.5 mA @ 24VDC			
Electrically Isolated Data:	Yes			
Electrically Isolated RF:	Yes			
Second Serial Port: (Pass-through to controller)	Yes, DB9F			
RADIO SPECIFICATIONS:				
Technology:	Frequency Hopping Spread Spectrum (FHSS)			
Operating Mode:	Master, Repeater and 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:	200 kHz			
Output Power:	1mW, 10 mW, 100mW, 1000mW			
Receiver Sensitivity:	-110dBm @ 10-6 BER			
Error checking:	32-Bit CRC, ARQ			
Encryption:				AES 128-Bit
Certification:				FCC, Industry Canada
OPERATING SPECIFICATIONS:	INTERFACE SPECIFICATIONS:			
Operating Temperature:	-40°F to 176°F (-40°C to 80°C)	Antenna Port:		RP-TNC-F
Environment Humidity:	0% to 95% non-condensing	Programming Port:		USB, Mini B
VISUAL INDICATORS:	<del>-</del>	PROGRAMMING APPLICATION: PULSE LINK (free of charge)		
Power:	Yes	Radio Configuration:		Yes
TX Data, RX Data	Yes	Spectrum Analyzer:		Yes
RSSI:	Yes	Signal Strength:		Yes
		Poll Test:		Yes
© encom ®		Firmware Upgrade:		Yes
In pgm		Security:		Yes, AES 128-Bit



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\*ENCOM Broadband radios require professional installation.

Specifications subject to change without notice. Visit www.encomwireless.com for updates

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