

RangeLAN2™

7910 Series Serial Adapter

Enabling the Portability of RS-232 Devices

Data Sheet



Advantages

- **Fast**
Serial transfer rates up to 115.2 Kbps with TCP/IP network services for reliable delivery.
- **Easy to Install**
Plug-and-play for most cable replacement solutions.
- **No-Maintenance Durability**
Wide temperature range and vibration specifications. Optional NEMA 4 outdoor enclosure available.
- **Battery Operation**
Wide input power range. Power saving mode available.

Bringing Wireless Connectivity to Serial Devices

The RangeLAN2 7910 Serial Adapter brings standards-based wireless connectivity to RS-232 serial devices. With easy installation, exceptional durability, reliability and outstanding performance the RangeLAN2 7910 will exceed your requirements for industrial-strength wireless connectivity.

Portable RS-232 Devices in Minutes

The RangeLAN2 7910 Serial Adapter is designed for plug-and-play installation. External switches and a simple configuration menu are provided if more detailed installation is required. In just minutes your serial device can be up and running—wirelessly.

No matter what your application—industrial, manufacturing, healthcare, retail, transportation or other—the RangeLAN2 7910 can help you meet your mission requirements at less cost by allowing you to place your RS-232 devices optimally for most efficient workflow. Your manufacturing lines become more flexible. PLCs and sensors can be set up to transmit and receive data over several miles. Retail sales stations can be added to handle seasonal surges in demand. Monitors and analyzers can be moved rapidly to the point of care. All without the hassle and added expense of wiring.

Point-to-point topology



Connectivity Options to Meet Your Needs

A full range of connectivity options are available to meet your wireless RS-232 device needs:

Point-to-point: Communicate between two serial devices without cables.

Multipoint: Communicate to more serial devices from one control unit.

Networked: Communicate through a RangeLAN2 network in either a point-to-point or a multipoint topology to one or more serial devices.

Designed for Industrial/Manufacturing Environments

This small, lightweight unit is rugged enough to be placed in the harshest of industrial or manufacturing environments. The RangeLAN2 7910 Serial Adapter brings connectivity to your most difficult locations with its wide temperature range and robust mechanical design. In addition, Proxim offers multiple antenna options to meet the service area coverage you require and a NEMA 4 enclosure for outdoor use.

Multipoint topology



Networked topology



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Specifications

General

Architecture Types	Point-to-Point, Multipoint, and Networked
Radio Data Rate	1.6 Mbps per channel, 800 Kbps fallback rate
Channels	Supports up to 15 independent, non-interfering virtual channels (hopping patterns)
Range (Standard Antenna)	Up to 500 feet (150 meters) radius indoors 1,000+ feet (300+ meters) radius outdoors XR technology can improve area coverage up to 30% indoors and up to 100% outdoors
Power Management (9 V)	Typical operating power: 160 mA, Typical sleep mode: 60 mA
Certifications	• US - FCC Part 15, UL • International - Contact Proxim for a list of currently certified countries
Compatibility	Fully interoperable with all RangeLAN2 or OpenAir certified products
Warranty	1 year parts and labor (return to factory)

Serial Information

Baud Rates	300, 1200, 2400, 4800, 9600, 19200, 38400, 57.6K and 115.2K
Data Formats	7 or 8 data bits; 1 or 2 stop bits; even, odd or no parity, mark and space
Flow Control	Full Hardware and software flow control supported
Connector	Female 9-Pin DSub

Network Information

Network Architecture Types	Communicates to wired networks via a RangeLAN2 Access or Extension Point
Network Protocols	TCP/IP and UDP/IP
Roaming	Supports RangeLAN2 roaming for seamless roaming between RangeLAN2 or OpenAir-certified Access Points
Domains	Up to 16 domains for simultaneous independent networks
Security	Encrypted Security ID

Management

Hardware Switches	For plug-and-play operation: <ul style="list-style-type: none">• Master/Station rotary switch• 10 position domain switch
Physical Management Connections	DB9 plug with standard serial cable (shipped with unit)
Software Upgrades	Downloadable over the serial port

Radio

Frequency Band	2.4 GHz frequency band, actual frequencies in use vary by country
Radio Type	Frequency Hopping Spread Spectrum (FHSS)
Output Power	100 mW, 500 mW with XR technology (varies by country, not user configurable)

Environmental

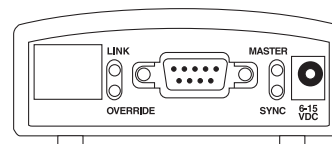
Temperature Range	-20 to 60 degrees centigrade
Humidity (non-condensing)	20 to 90% typical
Enclosure (available separately)	Optional NEMA 4 rain and splash proof; heater option; RF connectors

Physical Specifications

Weight	9.2 ounces (260 grams)
Size	5.40" L x 3.30" W x 1.35" H (1.37 cm x 8.4 cm x 3.4 cm) (width does not include the antenna connector)
Input Voltage	6 to 15 VDC (2.5 mm DC power jack)
Accessories Included	• Operating Manual • Power supply • 1 dBi Omnidirectional antenna • Serial Cable • Switch plugs • Switch setting tool

Ordering Information

7910	RangeLAN2 Wireless Serial Adapter, 100mW
7911	RangeLAN2 Wireless Serial Adapter XR, 500mW*



* Check for availability in your market



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