Zlinx Wireless, Industrial Radio Modems – up to 64 km (40 mi) range

B+B SMARTWORX

Powered by **ADVANTECH**

Models: BB-ZP24D-250RM-SR, BB-ZP9D-115RM-LR, BB-RM-LR-KIT, BB-RM-SR-KIT

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BB-ZP24D-250RM-SR

PRODUCT FEATURES

- Wire replacement for serial communications - cable-free, license-free
- Baud: 115.2 kbps (2.4 GHz, short range); 230.4 kbps (900 MHz, long-range, North America only)
- Wide operating temperature: -40 to +85 ºC
- DIN rail mount, 35mm (panel mount with optional adapter)
- High performance, low latency response rates (15 ms)
- Wide range power input: 10 to 48 VDC or 18 to 30 VAC
- Up to 64 km (40 mi) range with 900 MHz models and optional antenna
- Modbus & Profibus compatible – no additional conversion needed
- UL C1/D2 (900 MHz, long range model or kit, North America only)

Do you need to get a digital signal across a highway or river or to the other end of a big warehouse? Zlinx industrial serial radio modems can do the job faster, easier and less expensively than stringing cable. Zlinx radio modems connect serial devices over a wireless network with easy plug-and-play set-up that saves installation and maintenance time and cost. Modbus and Profibus compatible – no additional converters required.

NETWORK CONFIGURATION OPTIONS
Serial-to-Serial Connectivity: Two or more serial (RS-232/422/485) devices connected over a wireless network via Zlinx Radio Modems. One radio modem required per serial device (all radio modems must be of same frequency).

Modbus I/O Connectivity: Analog, digital and temperature I/Os (up to 247 base I/O modules, of one frequency type) can be connected wirelessly to a Modbus RTU Master (PLC, SCADA, HMI) via a Zlinx Radio Modem of the same frequency.

INDUSTRIAL-GRADE
Zlinx radio modems are designed to handle the heat, cold and environments of industrial oper ations and feature a wide operating temperature, dual power, a heavy-duty IP30 DIN mount case, industrial components and circuitry.
UL Class 1/Division 2 rated (900 MHz model).

RANGE
Despite their low prices, these are not wimpy consumer or office-grade products. Select the power level you need to punch through whatever distance and interference situations you encounter.

Model BB-ZP9D-115RM-LR (North America only) supports an indoor maximum range of 91 m (3000 ft) and outdoor maximum range of 22.5 km (14 mi). Includes RPSMA male dipole antenna. Longer ranges, up to 64 km (40 mi), are attainable with a high-gain antenna (sold separately).

Model BB-ZP924D-250RM-SR supports an ind oor maximum range of 91m (3000 ft) and outdoor maximum range of 1.6 km (1 mi).

ORDERING INFORMATION [1]

MODEL NUMBER	DESCRIPTION
BB-ZP24D-250RM-SR	Zlinx Radio Modem 2.4 GHz, Short Range, RS 232/422/485
BB-ZP9D-115RM-LR [2]	Zlinx Radio Modem 900 MHz, Long Range, RS-232/422/485
BB-RM-LR-KIT [3]	Long Range Starter Kit, 900 MHz, Radio Modem
BB-RM-SR-KIT [2, 3]	Short Range Starter Kit, 2.4 GHz, Radio Modem

Note 1: Order one radio modem for each serial device that you want to connect (use same frequency).
Note 2: 900 MHz model for North America only.
Note 3: Kits contain: (2) radio modems, (2) 24VDC 30W power supplies, (2) 1.8 m/6 ft serial cables
World-wide. Check with your local distributor for availability and options.

ACCESSORIES - sold separately
BB-DR-75-24 – 24V, 75W Industrial DIN Rail Power Supply
BB-ZP9D-ANT1 – 900 MHz Spare Antenna
BB-ZP24D-ANT1 – 2.4 GHz Spare Antenna
BB-ZP9D-DIN1 – Replacement DIN Clip Kit
BB-DRPM25 – Panel Mount Adapter

BB-RM-SR-KIT

SERIAL-TO-SERIAL WIRELESS KITS
Wireless starter kits conveniently bundle all the basics for wireless serial device communications into one box. See ordering table for model options. Each kit includes:
- (2) Radio modems (model dependant, 900 MHz or 2.4 GHz)
- (2) 24V power supplies
- (2) 1.8 m (6 ft) serial cables
- (1) Software CD

All product specifications are subject to change without notice.
BB-ZP9Dx & BB-ZP24Dx WirelessRadioModems_2318ds

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Zlinx Wireless, Industrial Radio Modems
– up to 64 km (40 mi) range

Models: BB-ZP24D-250RM-SR, BB-ZP9D-115RM-LR, BB-RM-LR-KIT, BB-RM-SR-KIT

BB-ZP9D-115RM-LR
(North America only)

SPECIFICATIONS

MODEL NUMBER:	BB-ZP24D-250RM-SR	BB-ZP9D-115RM-LR *(North America only)*
RF PROPERTIES		
Standard	IEEE 802.15.4	Proprietary Radio
Range (with included antenna)	Up to 91 m (3000 ft) indoor, or 1.6 km (1.0 mi) outdoor	Up to 91 m (3000 ft) indoor, Up to 22.5 km (14 mi) outdoor, (Up to 64 km (40 mi) attainable with optional high-gain antenna - sold separately)
Frequency	2.4 GHz	900 MHz
Transmit Power	10 mW (max)	1W (selectable)
SOFTWARE		
O/S Support	Windows XP, 7, 8, 8.1, 10	
Features	RSSI signal range test modem emulation	
INCLUDED OMNI ANTENNA		
dBi	2.1 dBi	3 dBi
Antenna Connector	External Reverse Polarity SMA male jack connector, omni directional (included with product)	
SERIAL PROPERTIES		
Baud	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400
Data Bit; Parity; Stop Bit	8 only; none only; 1 only	7, 8; None, even, odd, mark, space; 1, 2
RS-232	DB9F DCE or Terminal Block (TX, RX, GND available on Terminal Block	
RS-422	Removable terminal block, 2- or 4-wire: TX+, TX-, RX+, RX-, GND, 120 Ohms, dip switch selectable	
RS-485	Removable terminal block, 2- or 4-wire: TX+, TX-, RX+, RX-, GND, bit-wise, 120 Ohms, dip switch selectable	
Wireless Link Failure Output	Removable terminal block, source (PNP) transistor output, 40mA	
POWER		
Power Supply	10-48 VDC, 18-30 VAC, removeable terminal block	
Power Consumption	2.0W, maximum	5.0W, maximum
DIMENSIONS		
Enclosure	3.1W x 8.4D x 11.4H cm (1.2W x 3. 3D x 4.7H in)	
ENVIRONMENTAL		
Operating Temperature	-40 to +85 ºC	
Storage Temperature	-40 to +85 ºC	
Operating Humidity	10 to 90% non-condensing	
ENCLOSURE RATING		
Rating	IP30	
Mounting	DIN rail mount, 35mm	
LED Status	Power, Signal Strength, Wireless Data	
MEANTIME BEFORE FAILURE (MTBF) - MIL 217F		
MTFB	BB-ZP24D-250RM-SR: 1108125 hours BB-ZP9D-115RM-LR: 1137313 hours	
CERTIFICATIONS		
FCC	FCC Part 15 Class B	
CE (# BB-ZP24D-250RM-SR only)	CISPR (EN55032) Class B	
	EN61000-6-1 Generic Immunity Standardd for Residential, Commercial & Light Industrial	
	IEC 60950 - Safety Certification	
	Reduction of Hazardous Substances Directive (RoHS)	
UL	UL508 (E222870) (all models) UL Class 1/Division 2 (E245458) *(Model BB-ZP9D-115RM-LR only)*	