

IP67 Outdoor Rated Industrial Radio Modem

Zlinx Xtreme Wireless Radio Modems



PRODUCT FEATURES

- IP67 rated for outdoor applications
- RS-232/422/485, serial communications
- Modbus Compatible
- Ranges to 40 miles (64 km) Line of Sight & Antenna Dependent
- Heavy duty machine mount industrial grade case and components
- Signal strength indicator aids trouble shooting
- 900 MHz and 2.4 GHz versions
- Wide temperature range -40 to 74°C
- Wide range power input: 10VDC to 30VDC
- AES Encryption
- UL Class1/Division2
- NEMA TS2

Do you need to get a digital signal across a highway or river? Zlinx® Xtreme Radio Modems can do it faster, easier, and less expensively than stringing cable. Easy plug-and-play set-up saves installation and maintenance time. These compact and rugged IP67 units are ideal for outdoor applications requiring Serial-to-Serial (RS-232/422/485) connectivity or to connect Zlinx® Xtreme Wireless I/O's to a Modbus RTU Master over a wireless network. Point-to-Multi Point connections are also possible.

Zlinx® Industrial Wireless products operate in license-free, Proprietary RF 900 MHz and 2.4 GHz ISM bands. Select the 900 MHz version for longer distances. For further flexibility, the output power is software selectable.

The 900 MHz units offer 256 bit AES Encryption. The 2.4 GHz units have 128 bit AES Encryption.

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
ZXT9-RM	Zlinx Xtreme IP67 900MHz Radio Modem, Long Range, RS-232/422/485
ZXT24-RM	Zlinx Xtreme IP67 2.4GHz Radio Modem, Short Range, RS-232/422/485
ZXT9-RM-KIT	Zlinx Xtreme IP67 900MHz Radio Modem Kit, (2) Radio Modems, (2) 24VDC IP67 Power Supplies, (1) USB Programming Cable

World-wide.

Check with your local distributor for availability and options.
* Check wireless regulations/standards in your geographic area.

ACCESSORIES

CLG-60-24	IP67 Power Supply, Panel Mount, 24V DC, 60W
ZXT9-ANT	900 MHz Spare Antenna
ZZ24D-ANT1	2.4 GHz Spare Antenna
ZXTMT	Zlinx Xtreme Conduit Kit

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SPECIFICATIONS

RF PROPERTIES	
Physical Standard	802.15.4
FREQUENCY	
ZXT9-RM	900 MHz ISM (902-928 MHz)
ZXT24-RM	2.4 GHz ISM (2.4 to 2.5 GHz)
TRANSMIT POWER	
ZXT9-RM	1 mW, 10 mW, 100 mW, 500 mW 1 W – Software Selectable
ZXT24-RM	10 mW, 16 mW, 25 mW, 30 mW 63 mW – Software Selectable
Receiver Sensitivity	-100 dBm
OVER THE AIR DATA RATE	
ZXT9-RM	9.6 or 115.2 kbps
ZXT24-RM	Software Selectable 250 kbps
OUTDOOR RANGE	
ZXT9-RM	Supplied Antenna 14 mi (23 km) High Gain Antenna 40 mi (64 km)
ZXT24-RM	Supplied Antenna 1.5 mi (2.4 km) High Gain Antenna 10 mi (16 km)
Range estimates based on optimal RF conditions and an unobstructed line of sight.	
TRANSMISSION METHOD	
ZXT9-RM	FHSS
ZXT24-RM	DSSS
Modulation	FSK
CHANNEL CAPACITY	
ZXT9-RM	10 hop sequences share 50 Frequencies
ZXT24-RM	12 Direct Sequence Channels
Network Topologies	Peer-to-Peer, Point-to-Point, Point-to-Multi Point
ENCRYPTION	
ZXT9-RM	256 bit AES
ZXT24-RM	128 bit AES
SUPPLIED ANTENNA	
ZXT9-RM	Impedance – 50 Ω Connector – RPSMA Female VSWR – 2.0 Max (in-band) Gain – 3 dBi Polarization – Vertical Length – 7.8 in (198 mm)
ZXT24-RM	Impedance - 50Ω Connector – RPSMA Female VSWR – 2.0 Max (in-band) Gain – 2.1 dBi Polarization – Vertical Length – 4.38 in (113 mm)
Modem Antenna Con.	RPSMA Male
SOFTWARE	
Support	Win XP, 7
Features	RSSI signal range test

SERIAL PROPERTIES	
Data Rates	
ZXT9-RM	1.2 to 230.4 kbps
ZXT24-RM	1.2 to 115.2 kbps
Data Bits	8
Parity	None, Even, Odd, Mark, Space
Stop Bits	1 or 2
Flow Control	None or Software
RS-232	Connector: Terminal Block Signals: TD, RD, RTS, CTS, GND
RS-422	Connector: Terminal Block Signals: TDA(-) TDB(+) RDA(-) RDB(+) GND
RS-485 (2/4 Wire)	Connector: Terminal Block Signals (4-Wire): TDA(-), TDB(+), RDA(-), RDB(+), GND Signals (2-Wire): Data A(-), Data B(+), GND
SD Control	Automatic Bit Wise
Termination	120Ω Ohm DIP Switch Selectable
Industrial Bus	MODBUS RTU
POWER	
Power Connector	Terminal Block
Input Voltage	10 to 30 VDC
Power Use	ZXT9-RM: 1.7 W (typical), 5.8 W (maximum) ZXT24-RM: 1.2 W (typical), 3.5 W (maximum)
ENVIRONMENT	
Dimensions	5.12x5.12x2.37 in /130.1x130.1x60.2 mm
Operating Temp	-40° to 74°C (-40 to 165°F)
Storage Temp	-40° to 85°C (-40 to 185°F)
Op Humidity	0 to 95% (Non-Condensing)
Enclosure Rating	IP67
Use	Indoor and Outdoor
CERTIFICATIONS	
UL	UL, cUL, Class 1 Div 2 Groups A, B, C, D File E245458 EN55022: 2006 – Class A EN61000-6-1: 2006 – Heavy Industrial EN61000-4-2:2008 – ESD EN61000-4-3:2006 – EFT EN61000-4-6:2005 – Cond. Immunity
CE	Class A
FCC	FCC ID – ZXT9-RM – OUR-9XTEND FCC ID – ZXT24-RM – OUR-XBEEPRO
NEMA TS2	
CONTROLS AND INDICATORS	
Signal Strength	8 Green RSSI LED's indicate signal strength
Power	Green LED
Receive Data	Green LED
Transmit Data	Green LED
Programming Port	USB
Reset	Push Button