

ZXTx-RM

Zlinx Xtreme Radio Modem

- ✓ IP67 Rated for Outdoor Applications
- ✓ Modbus Compatible
- ✓ Wide Operating Temperature
- ✓ AES Encryption
- ✓ 900 MHz and 2.4 GHz Versions
- ✓ -40 to 74°C Operating Temperature

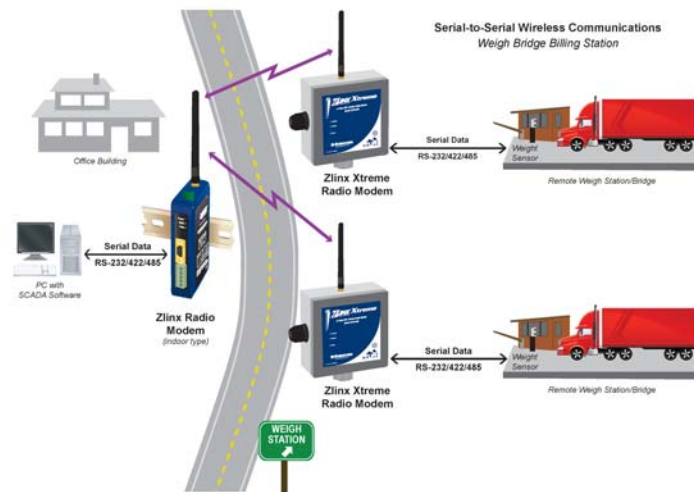


Need to get a digital signal across a highway or river?

Zlinx[®] Xtreme Radio Modems can do the job faster, easier, and less expensively than stringing cable. Easy plug-and-play set-up saves installation and maintenance time. These compact and rugged 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 the license-free, Proprietary RF 900 MHz and 2.4 GHz ISM band. 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 have 128 bit AES Encryption.



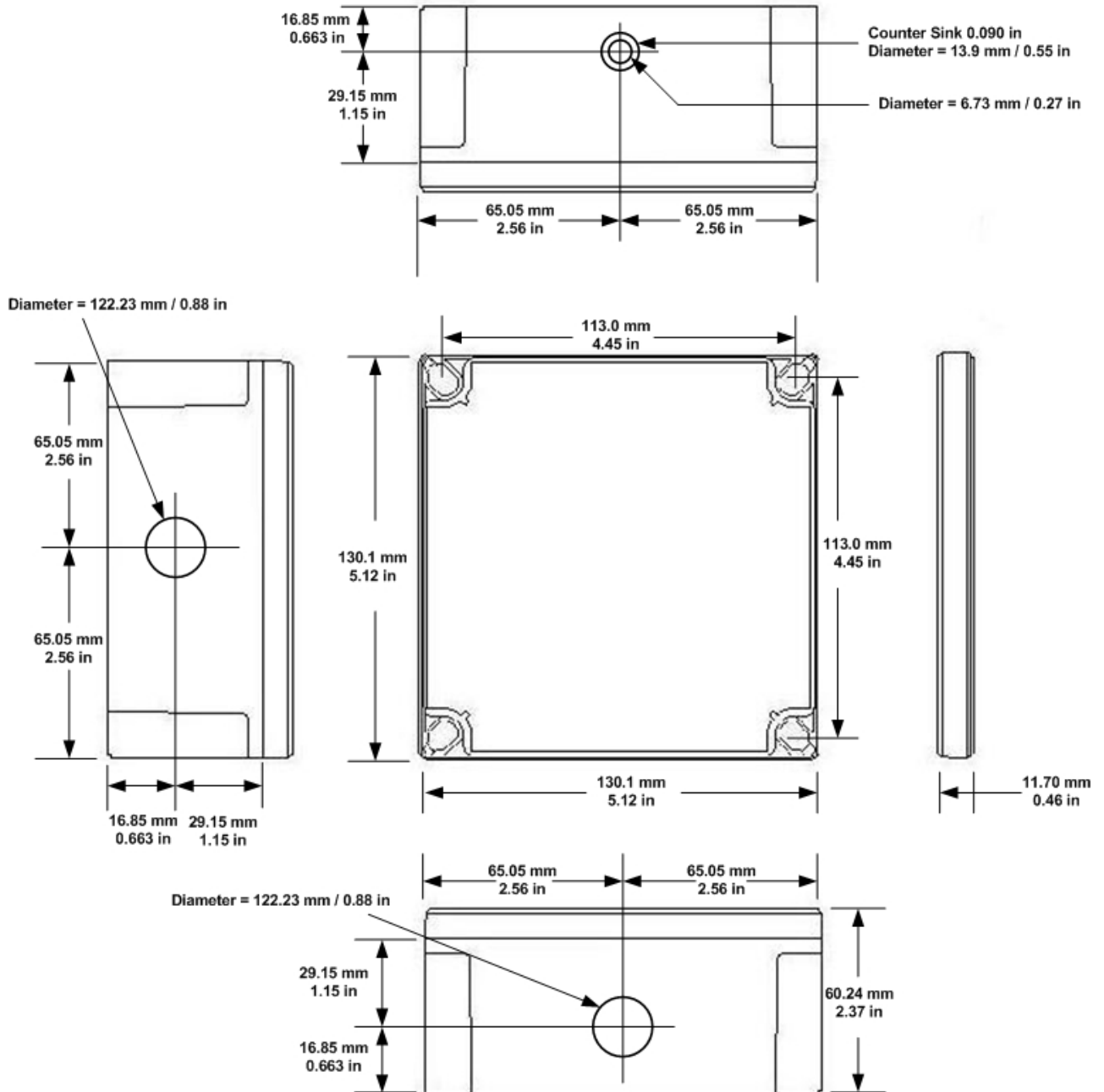
Ordering Information

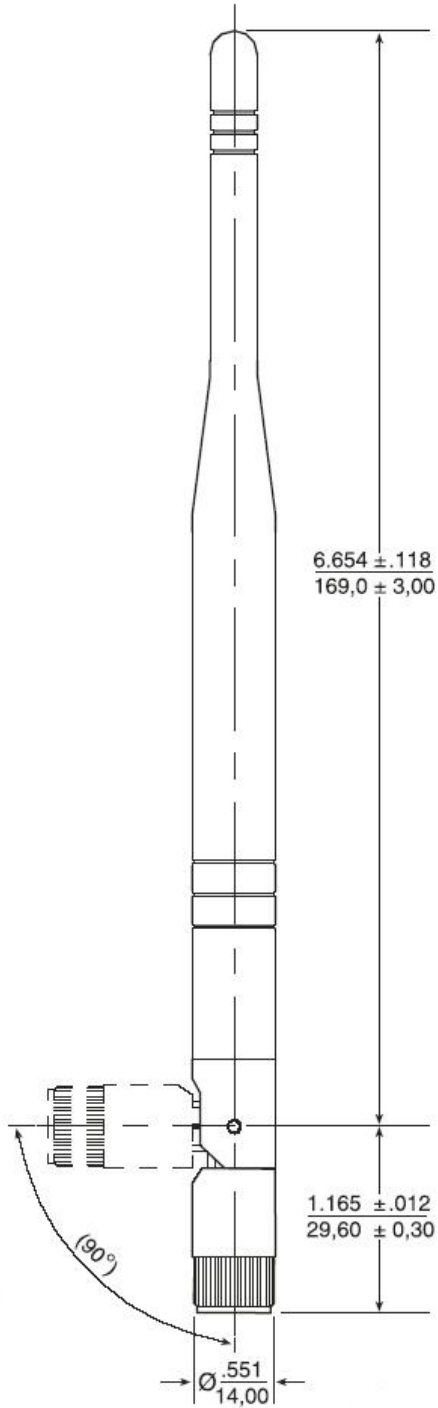
Model Number	Description
ZXT9-RM	ZLINX XTREME 900 MHZ RADIO MODEM
ZXT24-RM	ZLINX XTREME 2.4 GHZ RADIO MODEM
Accessories	
Power Supply	
CLG-60-24	IP67 Power Supply, Panel Mount, 24V DC 60 W
Spare Antenna	
ZXT9-ANT	900 MHz Spare Antenna
ZZ24D-ANT1	2.4 GHz Spare Antenna
A full range of antennas and accessories is available. Visit www.bb-electronics.com	

Specifications

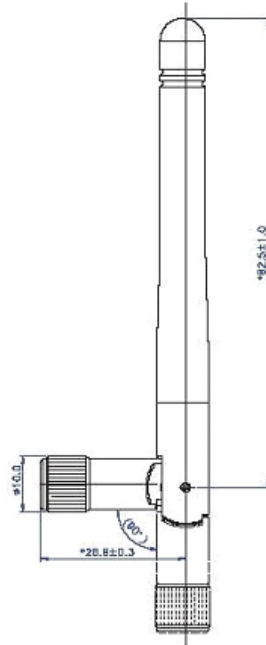
RF Properties		Serial Properties	
Physical Standard	802.15.4	RS-485 (2/4 Wire)	Terminal Block
Frequency	ZXT9-RM 900 MHz ISM (902-928 MHz) ZXT24-RM 2.4 GHz ISM (2.4 to 2.5 GHz)	Connector	TDA(-), TDB(+), RDA(-), RDB(+), GND
Transmit Power	1 mW, 10 mW, 100 mW, 500 mW 1 W – Software Selectable	Signals (4-Wire)	Data A(-), Data B(+), GND
	ZXT24-RM 10 mW, 16 mW, 25 mW, 30 mW 63 mW – Software Selectable	Signals (2-Wire)	Automatic Bit Wise
Receiver Sensitivity	-100 dBm	SD Control	120Ω Ohm DIP Switch Selectable
Over the Air Data Rate	ZXT9-RM 9.6 or 115.2 kbps Software Selectable	Termination	MODBUS RTU
	ZXT24-RM 250 kbps	Industrial Bus	
Outdoor Range		Power	
	ZXT9-RM Supplied Antenna 14 mi (23 km) High Gain Antenna 40 mi (64 km)	Power Connector	Terminal Block
	ZXT24-RM Supplied Antenna 1.5 mi (2.4 km) High Gain Antenna 10 mi (16 km)	Input Voltage	10 to 30 VDC
Range estimates based on unobstructed line of sight.	optimal RF conditions and an unobstructed line of sight.	Power Use	ZXT9-RM 1.7 W (typical), 5.8 W (maximum) ZXT24-RM 1.2 W (typical), 3.5 W (maximum)
Transmission Method		Environment	
	ZXT9-RM FHSS	Dimensions	5.12x5.12x2.37 in /130.1x130.1x60.2 mm
	ZXT24-RM DSSS	Operating Temp	-40 to 74°C (-40 to 165°F)
Modulation	FSK	Storage Temp	-40 to 85°C (-40 to 185°F)
Channel Capacity	ZXT9-RM 10 hop sequences share 50 Frequencies ZXT24-RM 12 Direct Sequence Channels	Op Humidity	0 to 95% (Non-Condensing)
Network Topologies	Peer-to-Peer, Point-to-Point, Point-to-Multi Point	Enclosure Rating	IP67
Encryption	ZXT9-RM 256 bit AES ZXT24-RM 128 bit AES	Use	Indoor and Outdoor
Supplied Antenna		Certifications	
	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)	CE	EN55022: 2006 – Class A EN61000-6-2:2006 – Heavy Industrial EN61000-4-2:2008 – ESD EN61000-4-3:2006 – Radiated Immunity EN61000-4-4:2004 – EFT EN61000-4-5:Ed2 2005 – Surges EN61000-4-6:2005 – Cond. Immunity Class A
	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)	FCC	FCC ID – ZXT9-RM – OUR-9XTEND FCC ID – ZXT24-RM – OUR-XBEEPRO
Modem Antenna Con.		Controls and Indicators	
	RPSMA Male	Signal Strength	8 Green RSSI LED's indicate signal strength
Serial Properties		Power	Green LED
Data Rate	ZXT9-RM 1.2 to 230.4 kbps ZXT24-RM 1.2 to 115.2 kbps	Receive Data	Green LED
Data Bits	8	Transmit Data	Green LED
Parity	None, Even, Odd, Mark, Space	Programming Port	USB
Stop Bits	1 or 2	Reset	Push Button
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		

Dimensional Diagram





ZXT9-RM Antenna



ZXT24-RM Antenna