

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

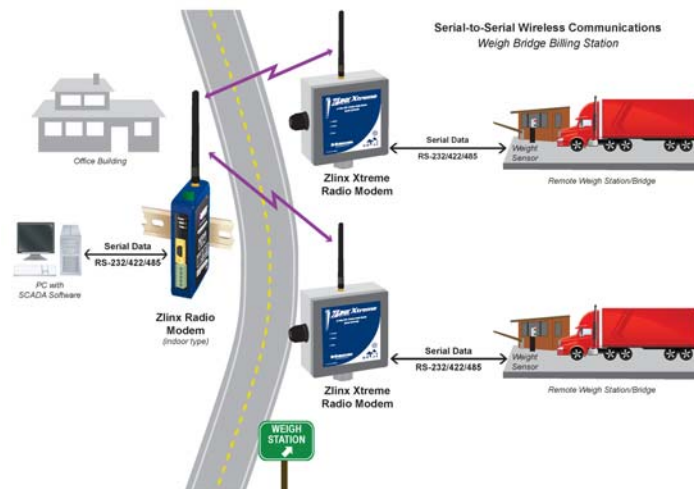


Need to get a digital signal across a highway or river?

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.



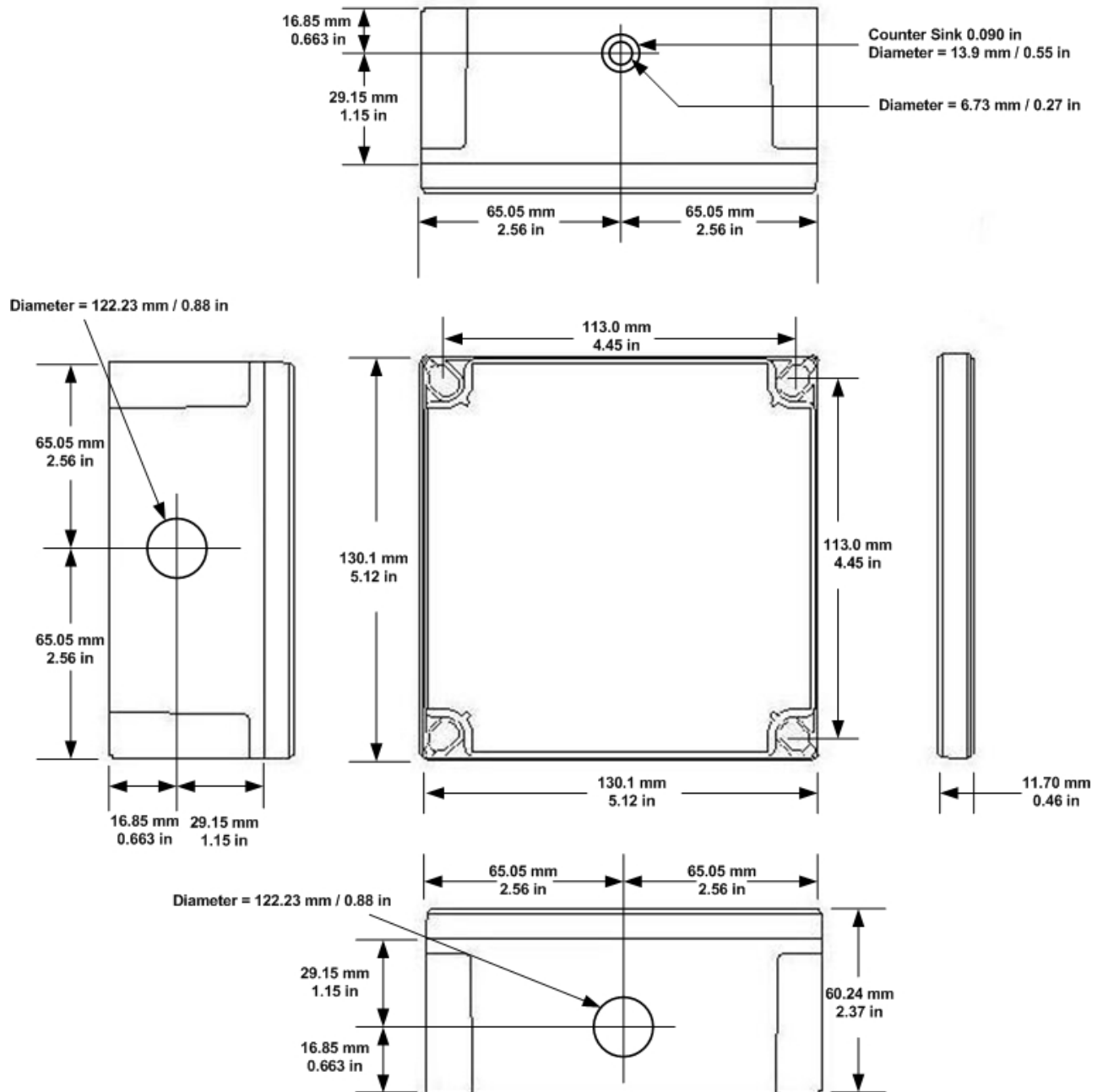
Ordering Information

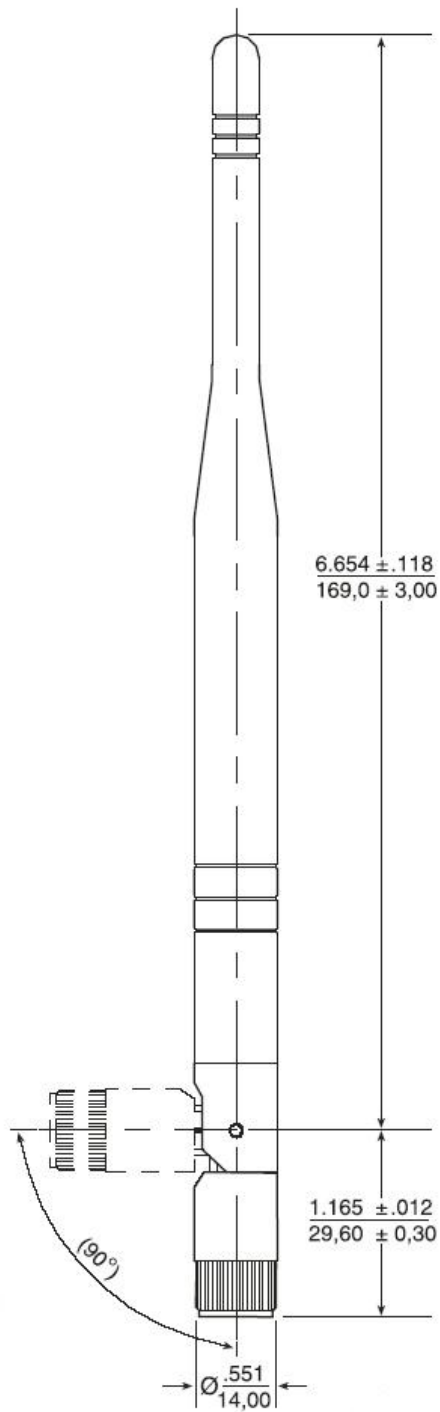
Model Number	Description
ZXT9-RM	ZLINX XTREME 900 MHZ RADIO MODEM
ZXT24-RM	ZLINX XTREME 2.4 GHZ RADIO MODEM
Accessories	
Power Supply	
CLG-60-24	IP67 Power Supply, Panel Mount, 24V DC 60 W
Spare Antenna	
ZXT9-ANT	900 MHz Spare Antenna
ZZ24D-ANT1	2.4 GHz Spare Antenna
A full range of antennas and accessories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

Specifications

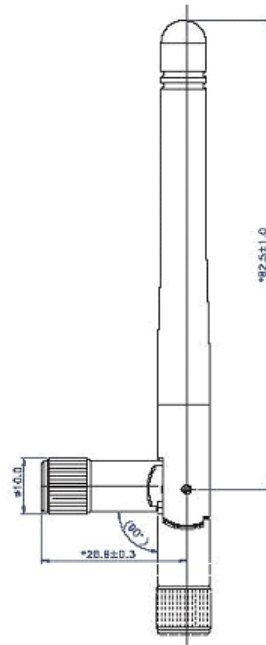
RF Properties		Serial Properties	
Physical Standard	802.15.4	RS-485 (2/4 Wire)	Terminal Block
Frequency		Connector	TDA(-), TDB(+), RDA(-), RDB(+), GND
ZXT9-RM	900 MHz ISM (902-928 MHz)	Signals (4-Wire)	Data A(-), Data B(+), GND
ZXT24-RM	2.4 GHz ISM (2.4 to 2.5 GHz)	Signals (2-Wire)	Automatic Bit Wise
Transmit Power		SD Control	120Ω Ohm DIP Switch Selectable
	1 mW, 10 mW, 100 mW, 500 mW	Termination	MODBUS RTU
	1 W – Software Selectable	Industrial Bus	
ZXT24-RM	10 mW, 16 mW, 25 mW, 30 mW	Power	
	63 mW – Software Selectable	Power Connector	Terminal Block
Receiver Sensitivity	-100 dBm	Input Voltage	10 to 30 VDC
Over the Air Data Rate		Power Use	
ZXT9-RM	9.6 or 115.2 kbps	ZXT9-RM	1.7 W (typical), 5.8 W (maximum)
	Software Selectable	ZXT24-RM	1.2 W (typical), 3.5 W (maximum)
ZXT24-RM	250 kbps	Environment	
Outdoor Range		Dimensions	5.12x5.12x2.37 in / 130.1x130.1x60.2 mm
ZXT9-RM	Supplied Antenna 14 mi (23 km)	Operating Temp	-40 to 74°C (-40 to 165°F)
	High Gain Antenna 40 mi (64 km)	Storage Temp	-40 to 85°C (-40 to 185°F)
ZXT24-RM	Supplied Antenna 1.5 mi (2.4 km)	Op Humidity	0 to 95% (Non-Condensing)
	High Gain Antenna 10 mi (16 km)	Enclosure Rating	IP67
Range estimates based on	optimal RF conditions and an	Use	Indoor and Outdoor
unobstructed line of sight.		Certifications	
Transmission Method		CE	EN55022: 2006 – Class A
ZXT9-RM	FHSS		EN61000-6-2:2006 – Heavy Industrial
ZXT24-RM	DSSS		EN61000-4-2:2008 – ESD
Modulation	FSK		EN61000-4-3:2006 – Radiated Immunity
Channel Capacity			EN61000-4-4:2004 – EFT
ZXT9-RM	10 hop sequences share 50		EN61000-4-5:Ed2 2005 – Surges
	Frequencies		EN61000-4-6:2005 – Cond. Immunity
ZXT24-RM	12 Direct Sequence Channels	FCC	Class A
Network Topologies	Peer-to-Peer, Point-to-Point,		FCC ID – ZXT9-RM – OUR-9XTEND
	Point-to-Multi Point		FCC ID – ZXT24-RM – OUR-XBEEPRO
Encryption		Controls and Indicators	
ZXT9-RM	256 bit AES	Signal Strength	8 Green RSSI LED's indicate signal strength
ZXT24-RM	128 bit AES	Power	Green LED
Supplied Antenna		Receive Data	Green LED
ZXT9-RM	Impedance – 50 Ω	Transmit Data	Green LED
	Connector – RPSMA Female	Programming Port	USB
	VSWR – 2.0 Max (in-band)	Reset	Push Button
	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		
Serial Properties			
Data Rate			
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		

Dimensional Diagram





ZXT9-RM Antenna



ZXT24-RM Antenna