

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

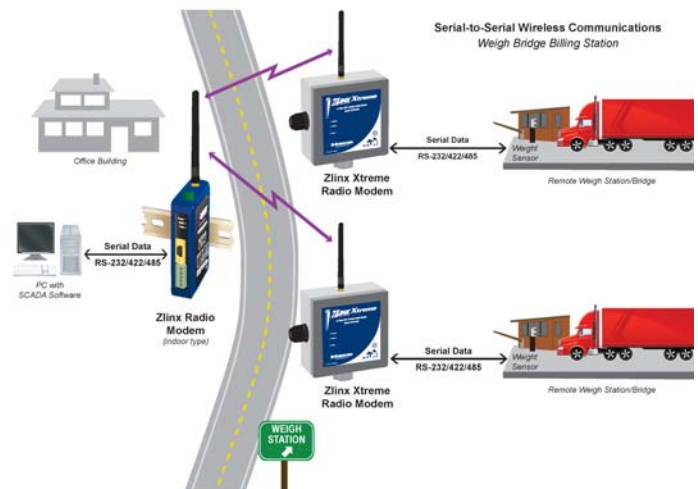


Need to get a digital signal across a highway or river?

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		
	63 mW – Software Selectable		
Receiver Sensitivity	-100 dBm		
Over the Air Data Rate			
ZXT9-RM	9.6 or 115.2 kbps		
	Software Selectable		
ZXT24-RM	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		

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

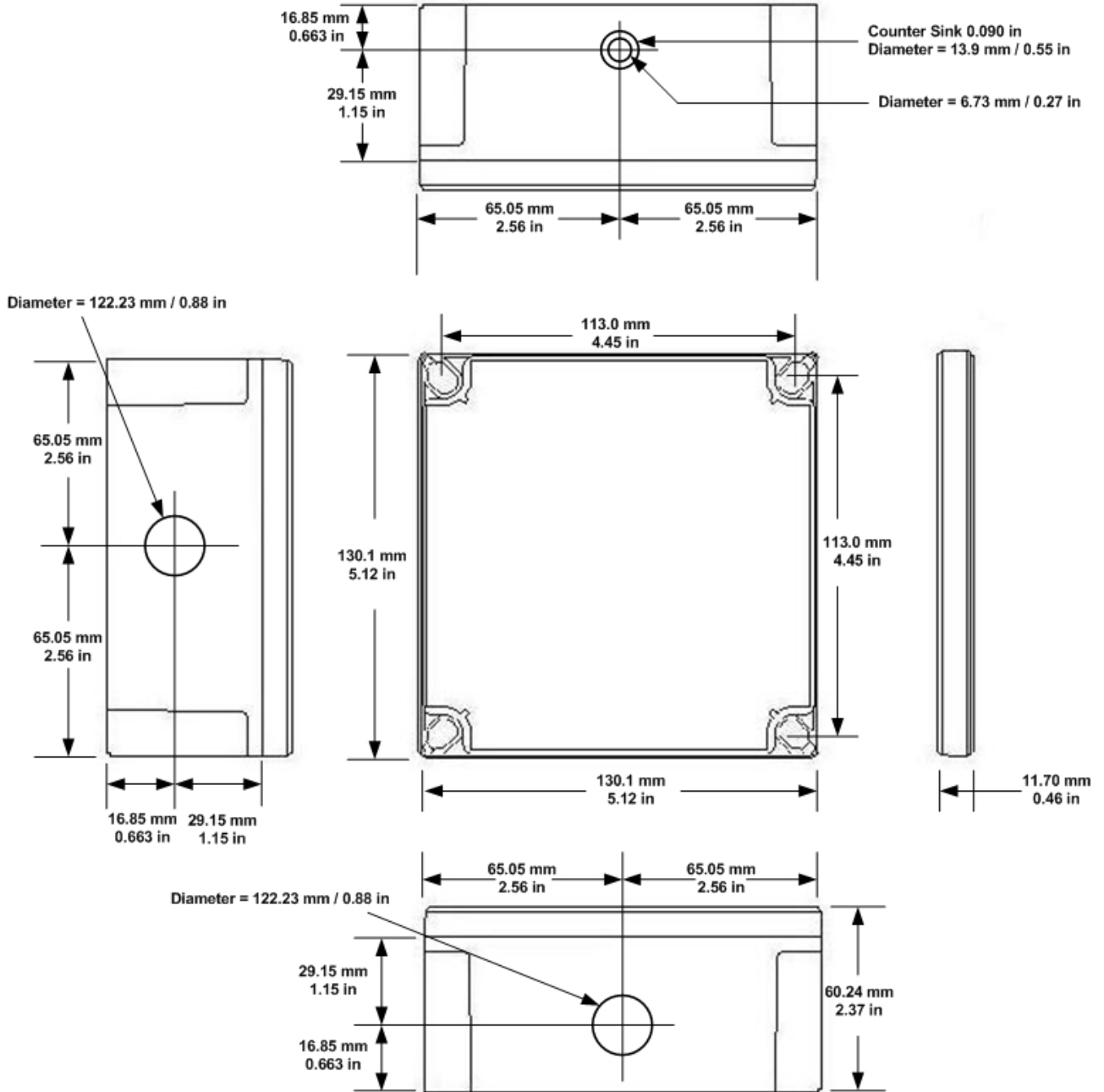
Power	
Power Connector	Terminal Block
Input Voltage	10 to 30 VDC
Power Use	
ZXT9-RM	1.7 W (typical), 5.8 W (maximum)
ZXT24-RM	1.2 W (typical), 3.5 W (maximum)

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	
CE	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
FCC	Class A FCC ID – ZXT9-RM – OUR-9XTEND FCC ID – ZXT24-RM – OUR-XBEEPRO

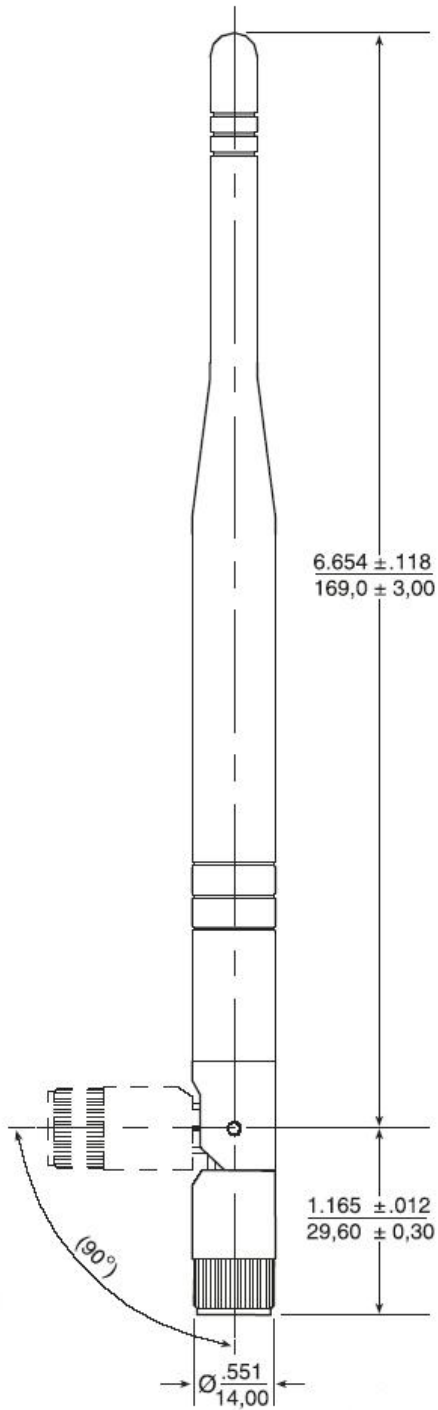
Controls and Indicators	
Signal Strength	8 Green RSSI LED's indicate signal strength
Power	Green LED
Receive Data	Green LED
Transmit Data	Green LED
Programming Port	USB
Reset	Push Button

Dimensional Diagram

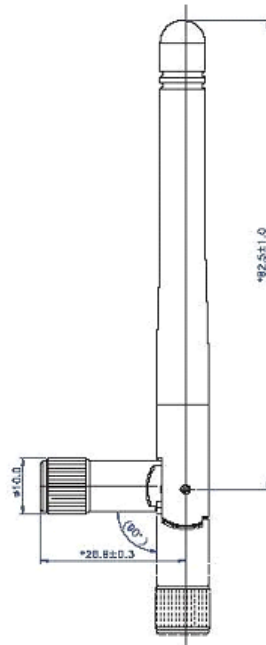


PRODUCT INFORMATION

B&B ELECTRONICS



ZXT9-RM Antenna



ZXT24-RM Antenna