

ZXTx-IO-xxxx

Zlinx Xtreme Wireless IO

- ✓ 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

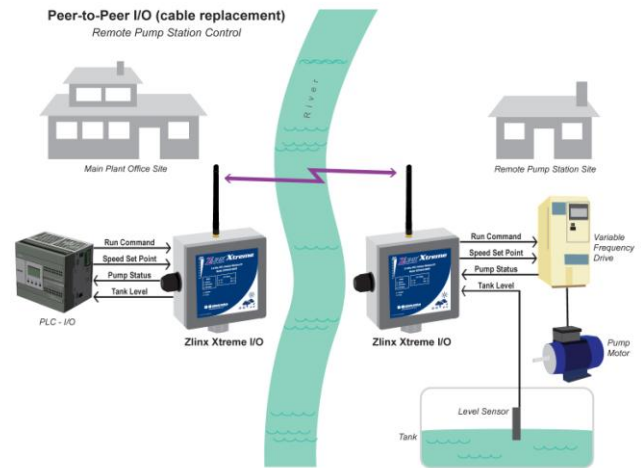


Need to monitor remote assets via discrete analog and digital sensors? Need to control remote control equipment from your central SCADA/PLC? Is the remote equipment outdoor? Zlinx Xtreme I/Os can do the job faster, easier and less expensive than stringing cable. These compact and rugged units are ideal for outdoor applications in extreme weather conditions for connecting remote I/Os to local I/Os wirelessly (via Peer-to-Peer Mode) and to connect remote I/Os in multiple locations to a central PLC or SCADA or HMI system via a Serial Radio Modem (Via Modbus mode).

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-IO-222R2	ZLINX XTREME 900 MHZ IO 2 AI, 2A O, 2 DI, 2 DO
ZXT24-RM	ZLINX XTREME 2.4 GHZ IO 2 AI, 2A O, 2 DI, 2 DO
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	

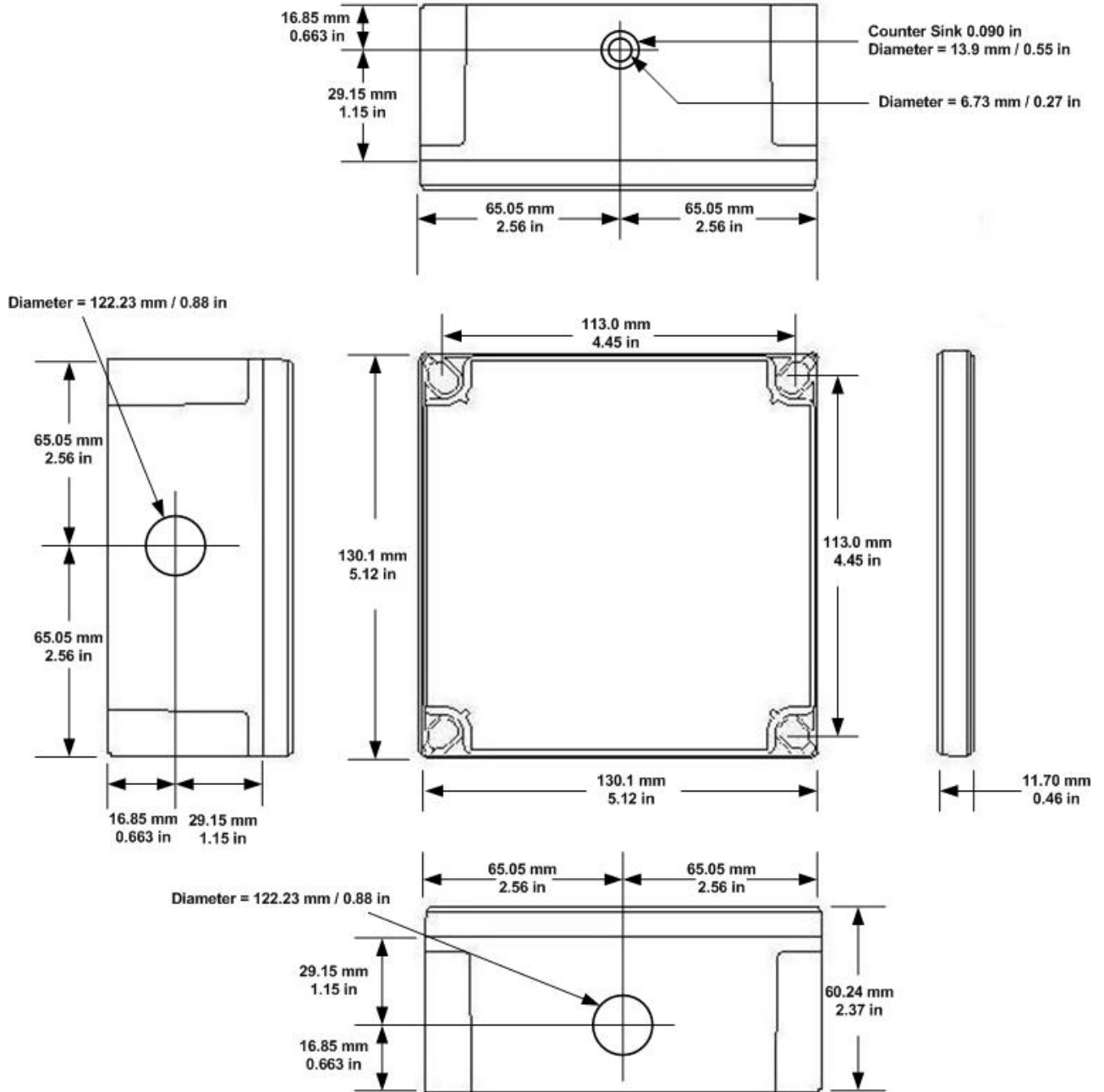
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Specifications

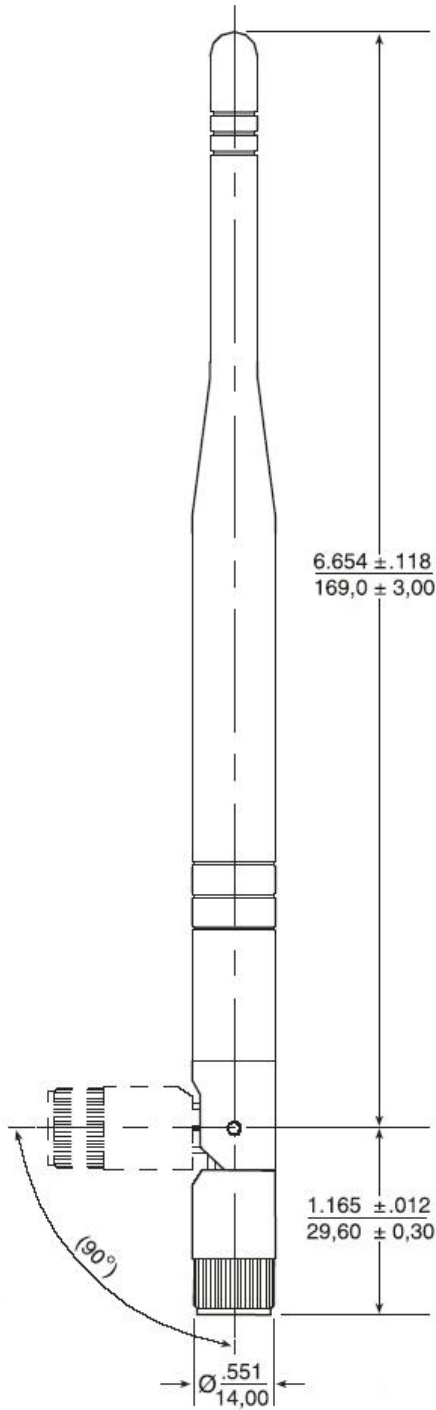
RF Properties		Digital Inputs	
Physical Standard	802.15.4	Voltage Range	0 to 48 VDC
Frequency	ZXT9-IO-xxxx 900 MHz ISM (902-928 MHz) ZXT24-IO-xxxx 2.4 GHz ISM (2.4 to 2.5 GHz)	Configuration	PNP (default) / NPN (selectable)
Transmit Power	ZXT9-IO-xxxx 1 mW, 10 mW, 100 mW, 500 mW 1 W – Software Selectable ZXT24-IO-xxxx 10 mW, 16 mW, 25 mW, 30 mW 63 mW – Software Selectable	Low Voltage (0)	1 VDC Maximum
Receiver Sensitivity	-100 dBm	High Voltage (1)	Greater than 1 VDC
Over the Air Data Rate	ZXT9-IO-xxxx 9.6 or 115.2 kbps Software Selectable ZXT24-IO-xxxx 250 kbps	Pull Up/Down	38 µA
Outdoor Range	ZXT9-IO-xxxx Supplied Antenna 14 mi (23 km) High Gain Antenna 40 mi (64 km) ZXT24-IO-xxxx Supplied Antenna 1.5 mi (2.4 km) High Gain Antenna 10 mi (16 km)	Current	
Range estimates based on unobstructed line of sight.	optimal RF conditions and an	Frequency Input	2 DIs per module software selectable as counters with 0 to 20 KHz range
Transmission Method	ZXT9-IO-xxxx FHSS ZXT24-IO-xxxx DSSS	Digital Outputs (Relay)	
Modulation	FSK	Number of Relays	2
Channel Capacity	ZXT9-IO-xxxx 10 hop sequences share 50 Frequencies ZXT24-IO-xxxx 12 Direct Sequence Channels	Type	C (Normally Open and Normally Closed)
Network Topologies	I/O to I/O: One-to-one (Peer-to-Peer mode) Radio Modem to I/O: One-to-many (Modbus I/O mode)	Output Connection	3 Terminals Per Relay (Common, NO, NC)
Encryption	ZXT9-IO-xxxx 256 bit AES ZXT24-IO-xxxx 128 bit AES	Com. Connection	3.5 mm Terminal Block
Supplied Antenna	ZXT9-IO-xxxx Impedance – 50 Ω Connector – RPSMA Female VSWR – 2.0 Max (in-band) Gain – 3 dBi Polarization – Vertical Length – 7.8 in (198 mm) ZXT24-IO-xxxx Impedance - 50Ω Connector – RPSMA Female VSWR – 2.0 Max (in-band) Gain – 2.1 dBi Polarization – Vertical Length – 4.38 in (113 mm)	Ratings	250 VAC @ 4 A, 30 VDC @ 4 A
Antenna Connection	RPSMA Male	Analog Inputs / Outputs	
		Ranges	0 to 5 VDC, 0 to 10 VDC, 0 to 20 mA 4 to 20 mA
		Resolution	16 bit (Inputs), 12 Bit (Outputs)
		AI Load Resistance	100 MΩ - configured for Voltage 250 Ω - configured for Current
		AO Output Current	1 mA maximum configured fro Voltage
		AO Source Load	450 Ω maximum configured for current
		Input Protection	Over voltage to 2x max input voltage
		Power	
		Power Connector	Terminal Block
		Input Voltage	10 to 30 VDC
		Power Use	ZXT9-IO-xxxx 6.8 W (maximum) ZXT24-IO-xxxx 4.5 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
		UL	C1D2, File – E245458
		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

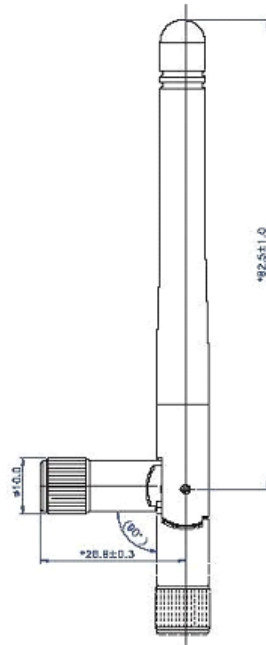


PRODUCT INFORMATION

B&B ELECTRONICS



ZXT9-IO Antenna



ZXT24-IO Antenna