

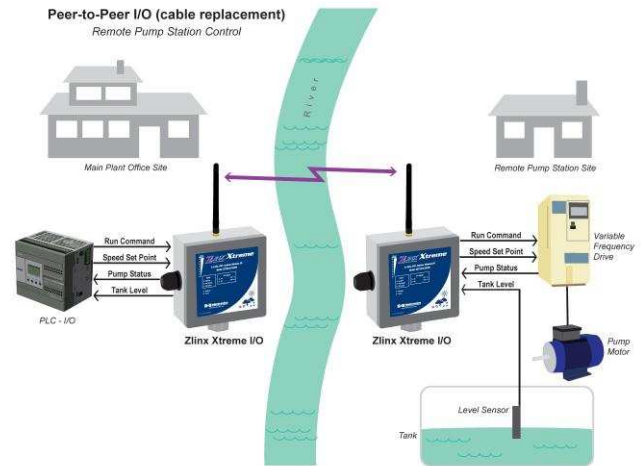
ZXTx-IO-xxxx

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-IO-222R2	ZLINX XTREME 2.4 GHZ ANALOG IO 2 AI, 2AO, 2DI, 2R
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

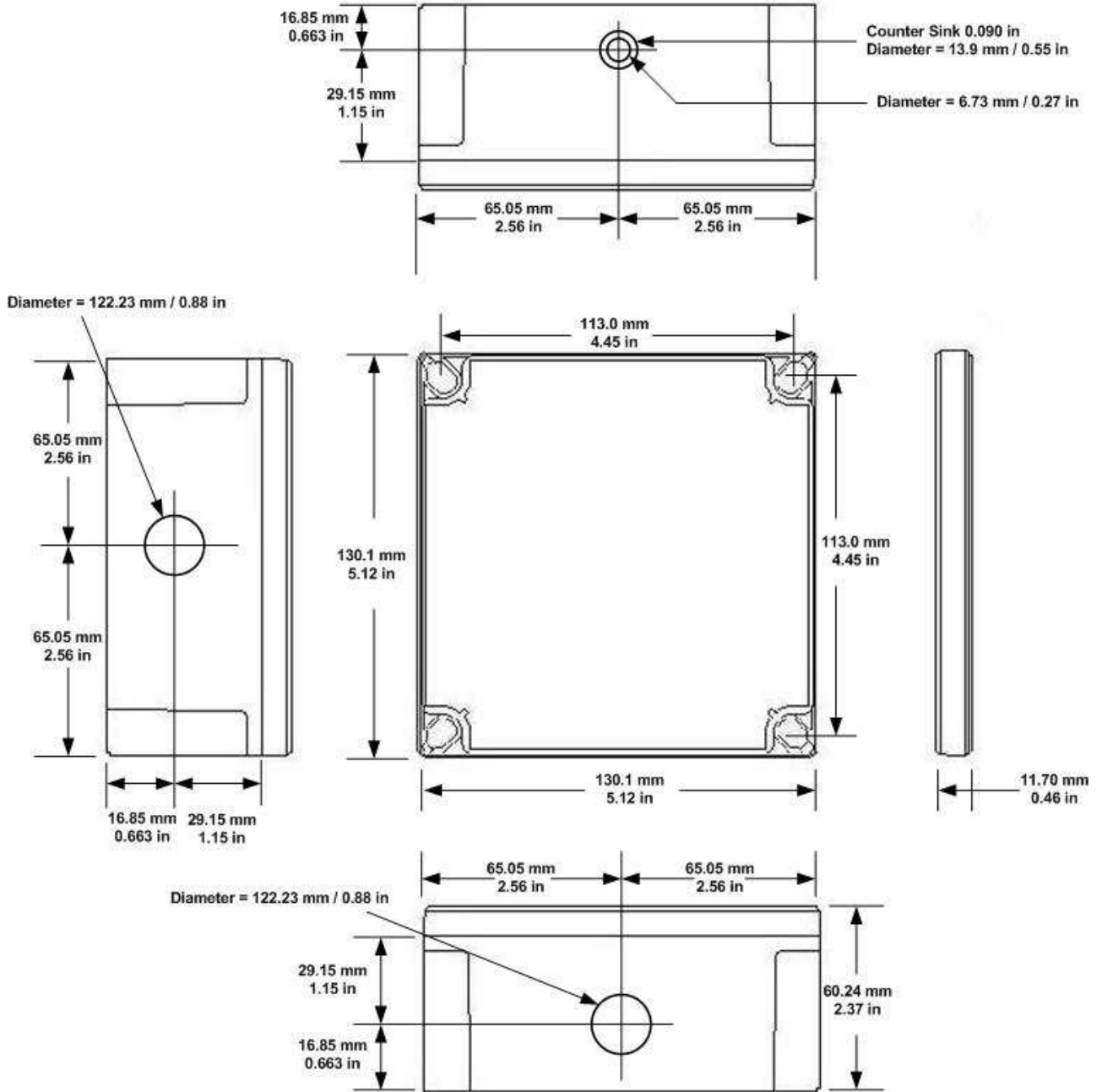
A full range of antennas and accessories is available. Visit www.bb-electronics.com

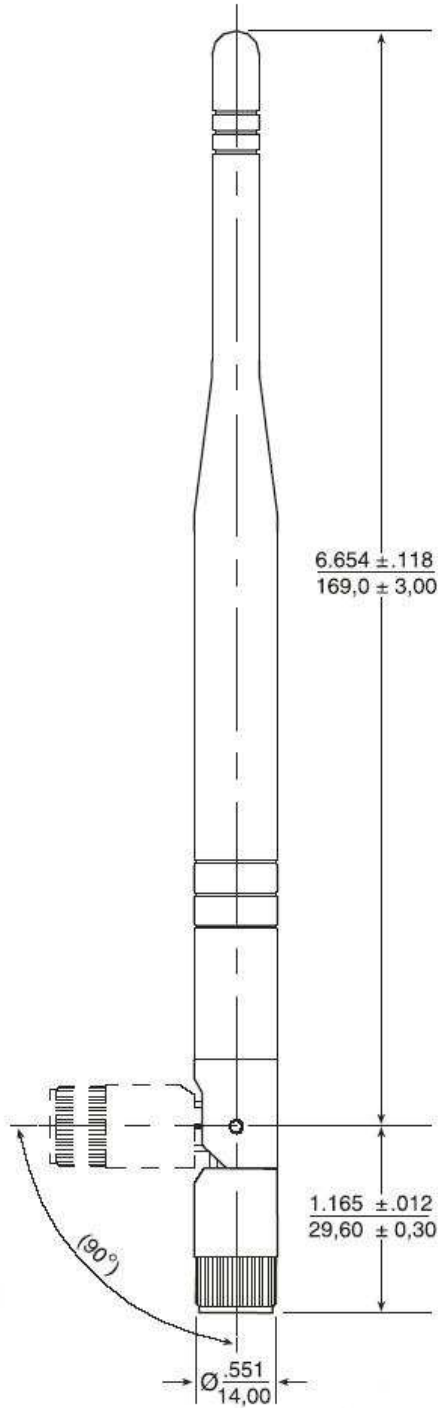


Specifications

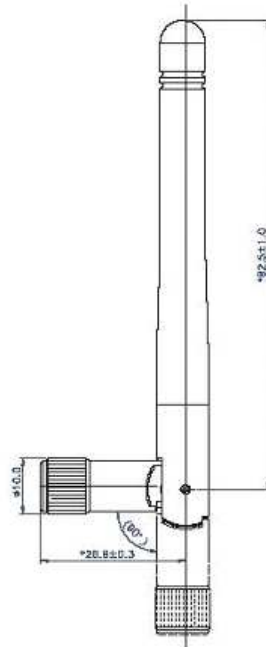
RF Properties		Digital Inputs	
Physical Standard	802.15.4	Voltage Range	0 to 48 VDC
Frequency		Configuration	PNP (default) / NPN (selectable)
ZXT9-IO-xxxx	900 MHz ISM (902-928 MHz)	Low Voltage (0)	1 VDC Maximum
ZXT24-IO-xxxx	2.4 GHz ISM (2.4 to 2.5 GHz)	High Voltage (1)	Greater than 1 VDC
Transmit Power		Pull Up/Down Current	38 µA
ZXT9-IO-xxxx	1 mW, 10 mW, 100 mW, 500 mW 1 W – Software Selectable	Frequency Input	2 DIs per module software selectable as counters with 0 to 20 KHz range
ZXT24-IO-xxxx	10 mW, 16 mW, 25 mW, 30 mW 63 mW – Software Selectable		
Receiver Sensitivity	-100 dBm	Digital Outputs (Relay)	
Over the Air Data Rate		Number of Relays	2
ZXT9-IO-xxxx	9.6 or 115.2 kbps Software Selectable	Type	C (Normally Open and Normally Closed)
ZXT24-IO-xxxx	250 kbps	Output Connection	3 Terminals Per Relay (Common, NO, NC)
Outdoor Range		Com. Connection	3.5 mm Terminal Block
ZXT9-IO-xxxx	Supplied Antenna 14 mi (23 km) High Gain Antenna 40 mi (64 km)	Ratings	250 VAC @ 4 A, 30 VDC @ 4 A
ZXT24-IO-xxxx	Supplied Antenna 1.5 mi (2.4 km) High Gain Antenna 10 mi (16 km)		
Range estimates based on unobstructed line of sight.	optimal RF conditions and an unobstructed line of sight.	Analog Inputs / Outputs	
Transmission Method		Ranges	0 to 5 VDC, 0 to 10 VDC, 0 to 20 mA 4 to 20 mA
ZXT9-IO-xxxx	FHSS	Resolution	16 bit (Inputs), 12 Bit (Outputs)
ZXT24-IO-xxxx	DSSS	AI Load Resistance	100 MΩ - configured for Voltage 250 Ω - configured for Current
Modulation	FSK	AO Output Current	1 mA maximum configured for Voltage
Channel Capacity		AO Source Load	450 Ω maximum configured for current
ZXT9-IO-xxxx	10 hop sequences share 50 Frequencies	Input Protection	Over voltage to 2x max input voltage
ZXT24-IO-xxxx	12 Direct Sequence Channels	Power	
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)	Power Connector	Terminal Block
Encryption		Input Voltage	10 to 30 VDC
ZXT9-IO-xxxx	256 bit AES	Power Use	
ZXT24-IO-xxxx	128 bit AES	ZXT9-IO-xxxx	6.8 W (maximum)
Supplied Antenna		ZXT24-IO-xxxx	4.5 W (maximum)
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)	Environment	
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)	Dimensions	5.12x5.12x2.37 in /130.1x130.1x60.2 mm
Antenna Connection	RPSMA Male	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 Class A
		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





ZXT9-IO Antenna



ZXT24-IO Antenna