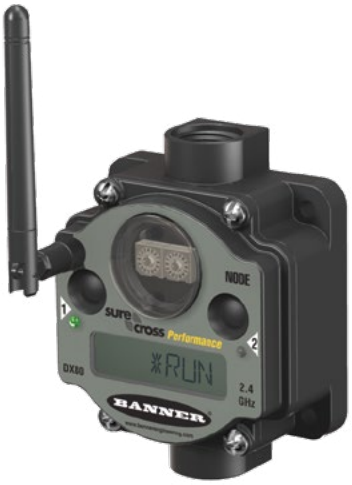


Performance Series—Gateways

Create point-to-multipoint networks that distribute I/O over large areas. Input and output types include discrete (dry contact, PNP/NPN), analog (0 to 10 V dc, 0 to 20 mA), temperature (thermocouple and RTD), and pulse counter.

Key Features:

- Enhanced Gateways offer increased range in the 900 MHz frequency band
- High density I/O capacity provides up to 12 discrete inputs or outputs or a mix of discrete and analog I/O
- Universal analog inputs allow current or voltage to be selected in the field


Low Profile


IP67 Housing


IP20 Housing


point-to-point


point-to-multipoint


star

DX80 Performance Gateways

Device	Radio	Host Comms	Power	Antenna		I/O
DX80	G	9	M	6	S	–	P2

G = Gateway

9 = 900 MHz
2 = 2.4 GHz

M = Modbus

2 = FlexPower
6 = 10 to 30 V dc

S = External

P = Serial RS485/RS232
P2 = 4 Discrete IN, 4 Discrete OUT, 2 Analog IN, 2 Analog OUT
P7 = FlexPower, 12 NPN Discrete IO
P8 = 12 PNP Discrete IO

DX80 Performance Gateways, Board Models

Device	Radio	Host Comms	Power	Antenna		I/O
DX80	G	9	M	6	S	–	PB2

G = Gateway

9 = 900 MHz
2 = 2.4 GHz

M = Modbus

6 = 10 to 30 V dc

S = External

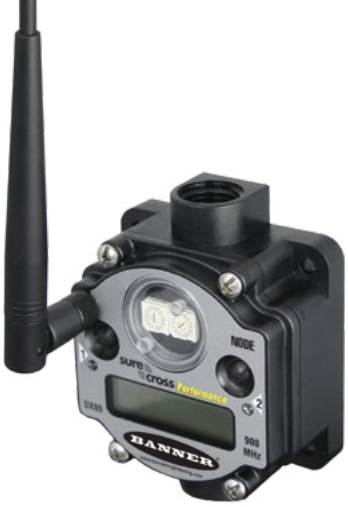
PB2 = Board Module, 2 Discrete IN, 2 Discrete OUT, 2 Analog IN, 2 Analog OUT

DX80 Performance Gateway Specifications*

Radio Range	900 MHz, 1 Watt: Up to 9.6 km (6 miles)	2.4 GHz, 65 mW: Up to 3.2 km (2 miles)
Minimum Separation Distance	900 MHz, 1 Watt: 4.57 m (15 ft)	2.4 GHz, 65 mW: 0.3 m (1 ft)
Radio Transmit Power	900 MHz, 1 Watt: 30 dBm (1 W) conducted (up to 36 dBm EIRP)	2.4 GHz, 65 mW: 18 dBm (65 mW) conducted, less than or equal to 20 dBm (100 mW) EIRP
Compliance	900 MHz Compliance (1 Watt) FCC ID UE3RM1809: This device complies with FCC Part 15, Subpart C,15.247 IC: 7044A-RM1809	2.4 GHz Compliance FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247 ETSI/EN: In accordance with EN 300 328: V1.8.1 (2012-06) IC: 7044A-DX8024
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)	

Communication Hardware	Interface: 2-wire half-duplex RS-485 Baud rates: 9.6k, 19.2k (default), or 38.4k via DIP switches Data format: 8 data bits, no parity, 1 stop bit
Communication Protocol	Modbus RTU
Link Timeout	Gateway: Configurable via User Configuration Tool (UCT) software Node: Defined by Gateway
RTD Inputs	Sample Rate: 1 second Report Rate: 16 seconds Accuracy: 0.1% of full scale Resolution: 0.1 °C, 15-bit
Operating Conditions	–40 °C to +85 °C (–40 °F to +185 °F) (Electronics); –20 °C to +80 °C (–4 °F to +176 °F) (LCD) 95% maximum relative humidity (non-condensing) Radiated Immunity: 10 V/m (EN 61000-4-3)
Shock and Vibration	IEC 68-2-6 and IEC 68-2-27 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz
Supply Voltage	DX80 and “C” Housing Models:10 to 30 V dc or 3.6 to 5.5 V dc low power option (Outside the USA: 12 to 24 V dc, ±10% or 3.6 to 5.5 V dc low power option) 900 MHz Consumption: Maximum current draw is < 40 mA and typical current draw is < 30 mA at 24 V dc. (2.4 GHz consumption is less)
Construction	Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers Weight: 0.26 kg (0.57 lbs) DX80 and “C” Housing Models: Mounting: #10 or M5 (SS M5 hardware included) Max. Tightening Torque: 0.56 N·m (5 lbf·in)
Antenna Connection	Ext. Reverse Polarity SMA, 50 Ohms Max Tightening Torque: 0.45 N·m (4 lbf·in)
Interface	Indicators: Two bi-color LEDs Buttons: Two Display: Six character LCD
Wiring Access	DX80 Housing Models: Four PG-7, One 1/2-in NPT, One 5-pin threaded M12/Euro-style male quick-disconnect “C” Housing Models: External terminals
Environmental Rating	DX80 models: IEC IP67; NEMA 6 “C” Housing Models: IEC IP20; NEMA 1
Certifications	CE

* See datasheet for model specific details



Performance Series—Nodes

Create point-to-multipoint networks that distribute I/O over large areas. Input and output types include discrete (dry contact, PNP/NPN), analog (0 to 10 V dc, 0 to 20 mA), temperature (thermocouple and RTD), and pulse counter.

Key Features:

- Enhanced Nodes offer increased range in the 900 MHz frequency band
- High density I/O capacity provides up to 12 discrete inputs or outputs or a mix of discrete and analog I/O
- Universal analog inputs allow current or voltage to be selected in the field


Low Profile


IP67 Housing


IP20 Housing


point-to-point


point-to-multipoint


star

DX80 Performance Nodes

DX80	Device	Radio	Host Comms	Power	Antenna		I/O	Housing Options
DX80	N	9	X	6	S	–	P2	

Device
- **N** = Node

Radio
- **9** = 900 MHz
- **2** = 2.4 GHz

Host Comms
- **X** = None

Power
- **1** = Internal battery (P1E, P3E, P4E, P6)
- **2** = FlexPower (P1, P3, P4, P5, P7)
- **6** = 10 to 30 V dc (P2, P6, P8)

Antenna
- **S** = External

I/O
- **P1** = FlexPower, 2 Discrete IN, 2 Discrete OUT, 2 Analog IN, Boost Voltage
- **P2** = 4 Discrete IN, 4 Discrete OUT, 2 Analog IN, 2 Analog OUT
- **P3** = FlexPower, Thermocouple
- **P4** = FlexPower, RTD
- **P5** = FlexPower, 2 Disc IN, 2 Disc OUT, 4 Analog IN
- **P6** = Serial interface
- **P7** = FlexPower, 12 NPN Discrete IO
- **P8** = 12 PNP Discrete IO
- **P14** = 1 Configurable Discrete IN, 1 Configurable Analog IN, 1 Thermistor, 1 Async Counter, 1 SP
- **P15** = 2 Selectable Discrete IN, 2 0–10V Analog IN, 2 AC/DC Relay (SPDT), 2 PNP Disc OUT, 2 0–10V Analog OUT
- **P16** = 2 Configurable Disctete IN, 2 Async Counters, 4 NMOS OUT
- **DCLATCH** = 1 Discrete IN, 1 Event Counter, 1 DC Latching (H-Bridge) OUT

DX80 Performance Nodes, Board Models

DX80	Device	Radio	Host Comms	Power	Antenna		I/O
DX80	N	9	X	6	S	–	PB2

Device
- **N** = Node

Radio
- **9** = 900 MHz
- **2** = 2.4 GHz

Host Comms
- **X** = None

Power
- **2** = FlexPower
- **6** = 10 to 30 V dc

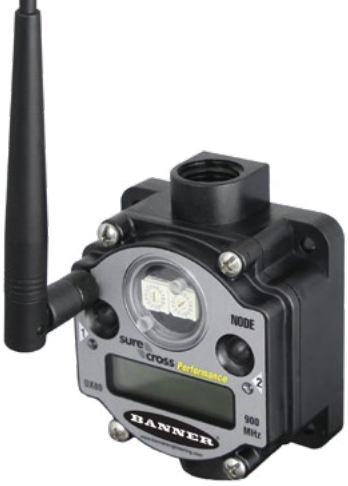
Antenna
- **S** = External
- **W** = Internal

I/O
- **PB1** = Board Module, FlexPower, 2 Discrete IN, 2 Discrete OUT, 2 Analog IN
- **PB2** = Board Module, 2 Discrete IN, 2 Discrete OUT, 2 Analog IN, 2 Analog OUT

DX80 Performance Nodes Specifications*

Radio Range	900 MHz, 1 Watt: Up to 9.6 km (6 miles)	2.4 GHz, 65 mW: Up to 3.2 km (2 miles)
Minimum Separation Distance	900 MHz, 1 Watt: 4.57 m (15 ft)	2.4 GHz, 65 mW: 0.3 m (1 ft)
Radio Transmit Power	900 MHz, 1 Watt: 30 dBm (1 W) conducted (up to 36 dBm EIRP)	2.4 GHz, 65 mW: 18 dBm (65 mW) conducted, less than or equal to 20 dBm (100 mW) EIRP
Compliance	900 MHz Compliance (1 Watt) FCC ID UE3RM1809: This device complies with FCC Part 15, Subpart C,15.247 IC: 7044A-RM1809	2.4 GHz Compliance FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247 ETSI/EN: In accordance with EN 300 328: V1.8.1 (2012-06) IC: 7044A-DX8024
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)	
Link Timeout	Gateway: Configurable via User Configuration Tool (UCT) software Node: Defined by Gateway	
Operating Conditions	–40 °C to +85 °C (–40 °F to +185 °F) (Electronics); –20 °C to +80 °C (–4 °F to +176 °F) (LCD) “E” Housing Models–40 °C to +65 °C (–40 °F to +149 °F) (Electronics); –20 °C to +80 °C (–4 °F to +176 °F) (LCD) 95% maximum relative humidity (non-condensing) Radiated Immunity: 10 V/m (EN 61000-4-3)	
Shock and Vibration	IEC 68-2-6 and IEC 68-2-27 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz	
Supply Voltage	DX80 and “C” Housing Models:10 to 30 V dc or 3.6 to 5.5 V dc low power option (Outside the USA: 12 to 24 V dc, ±10% or 3.6 to 5.5 V dc low power option) “E” Housing Models: 3.6 V dc low power option from an internal battery or 10 to 30 V dc 900 MHz Consumption: Maximum current draw is < 40 mA and typical current draw is < 30 mA at 24 V dc. (2.4 GHz consumption is less)	
Construction	Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers Weight: 0.26 kg (0.57 lbs) DX80 and “C” Housing Models: Mounting: #10 or M5 (SS M5 hardware included) “E” Housing Models: Mounting: 1/4-in or M7 (SS M7 hardware included) Max. Tightening Torque: 0.56 N·m (5 lbf·in)	
Antenna Connection	Ext. Reverse Polarity SMA, 50 Ohms Max Tightening Torque: 0.45 N·m (4 lbf·in)	
Interface	Indicators: Two bi-color LEDs Buttons: Two Display: Six character LCD	
Wiring Access	DX80 Housing Models: Four PG-7, One 1/2-in NPT, One 5-pin threaded M12/Euro-style male quick-disconnect “C” Housing Models: External terminals “E” Housing Models: Two 1/2-in NPT	
Environmental Ratingw	DX80 models: IEC IP67; NEMA 6 “C” Housing Models: IEC IP20; NEMA 1 “E” Housing Models: IEC IP65; NEMA 4X	
Certifications	CE	

* See datasheet for model specific details



Performance Series–P6 Nodes

The -P6 Performance Node is an industrial radio device with a 1-wire Serial Interface that is designed to transmit data from 1-wire Serial sensors, such as the Banner Temperature and Humidity (M12FTH4Q), Vibration and Temperature (QM42VT1), or Ultrasonic (K50UX1RA) sensors.

Key Features:

- 1-wire Serial Interface
- Battery-powered models for a completely wireless solution
- Line-powered models for continuous sampling

point-to-point

point-to-multipoint

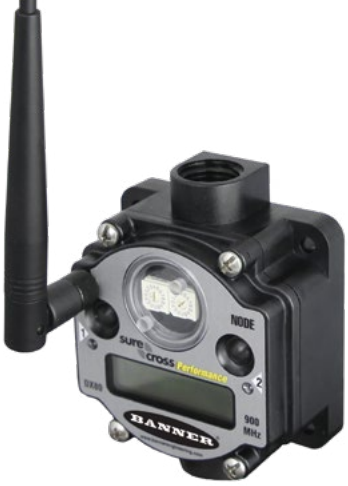
star

	Device	Radio	Host Comms	Power	Antenna		I/O	Housing Options
DX80	N	9	X	6	S	–	P6	
	N = Node	**9** = 900 MHz **2** = 2.4 GHz	**X** = None	**1** = Internal battery **6** = 10 to 30 V dc	**S** = External **W** = Internal		**P6** = Serial interface	**Blank** = IP67 **L** = No LCD, no rotary dials

Used with		
M12FTH4Q	Temperature and relative humidity via a 1-wire Serial Interface	see page 6
M12FT4Q	Temperature via a 1-wire Serial Interface	
QM42VT1	Vibration and temperature via a 1-wire Serial Interface	see page 10
K50UX1RA	Ultrasonic sensor with a 1-wire Serial Interface	see page 12

DX80 Performance P6 Specifications

Radio Range	900 MHz, 1 Watt: Up to 9.6 km (6 miles)	2.4 GHz, 65 mW: Up to 3.2 km (2 miles)
Minimum Separation Distance	900 MHz, 1 Watt: 4.57 m (15 ft)	2.4 GHz, 65 mW: 0.3 m (1 ft)
Radio Transmit Power	900 MHz, 1 Watt: 30 dBm (1 W) conducted (up to 36 dBm EIRP)	2.4 GHz, 65 mW: 18 dBm (65 mW) conducted, less than or equal to 20 dBm (100 mW) EIRP
Compliance	900 MHz Compliance (1 Watt) FCC ID UE3RM1809: This device complies with FCC Part 15, Subpart C,15.247 IC: 7044A-RM1809	2.4 GHz Compliance FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247 ETSI/EN: In accordance with EN 300 328: V1.8.1 (2012-06) IC: 7044A-DX8024
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)	
Link Timeout	Gateway: Configurable via User Configuration Tool (UCT) software Node: Defined by Gateway	
Operating Conditions	–40 °C to +85 °C (–40 °F to +185 °F) (Electronics); –20 °C to +80 °C (–4 °F to +176 °F) (LCD) 95% maximum relative humidity (non-condensing) Radiated Immunity: 10 V/m (EN 61000-4-3)	
Shock and Vibration	IEC 68-2-6 and IEC 68-2-27 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz	
Supply Voltage	Integrated battery models: 3.6 V dc low power option from an internal battery Non-battery models: 10 to 30 V dc (Outside the USA: 12 to 24 V dc, ±10%)	
Construction	Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers Integrated battery models: Weight: 0.30 kg (0.65 lbs) Non-battery models: Weight: 0.26 kg (0.57 lbs) Mounting: #10 or M5 (SS M5 hardware included) Max. Tightening Torque: 0.56 N·m (5 lbf·in)	
Antenna Connection	Ext. Reverse Polarity SMA, 50 Ohms Max Tightening Torque: 0.45 N·m (4 lbf·in)	
Interface	Indicators: Two bi-color LEDs Buttons: Two Display: Six character LCD	
Wiring Access	Integrated battery models: One 5-pin threaded M12 Euro-style female quick-disconnect Non-battery models: One 5-pin threaded M12 Euro-style female quick-disconnect and one 5-pin threaded M12 Euro-style male quick-disconnect	
Environmental Rating	IEC IP67; NEMA 6	
Certifications	CE	



Performance Series–P14 Nodes

The -P14 Performance Node is an industrial radio device that makes it easy to add a remote monitoring point to a wireless network. Simply select one I/O from multiple options, then wire a sensor into the easily accessible wiring terminals inside the Node. The integrated D-cell lithium battery makes it easy to deploy, even where power is not readily available.

Key Features:

- Inputs include: One configurable discrete, one configurable analog, one thermistor, one asynchronous counter
- Battery-powered models for a completely wireless solution
- Field-wireable terminal for wiring I/O

Applications:

- Door monitoring
- Tank level monitoring
- High speed counting
- Flow monitoring
- RPM monitoring
- Non-contact temperature monitoring
- Pressure monitoring

point-to-point

point-to-multipoint

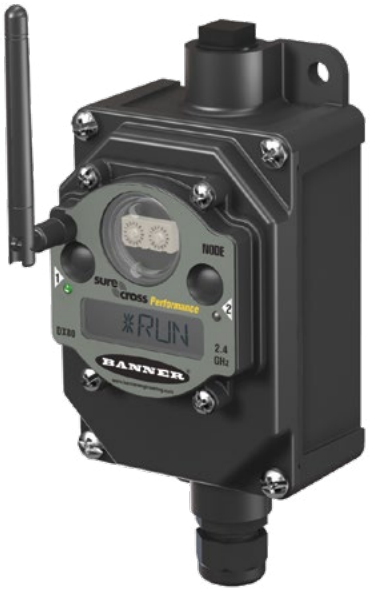
star

DX80	Device	Radio	Host Comms	Power	Antenna	–	I/O	Housing Options
	N	**9**	**X**	**1**	**S**		**P14**	
	N = Node	**9** = 900 MHz **2** = 2.4 GHz	**X** = None	**1** = Internal battery	**S** = External **W** = Internal		**P14** = 1 Configurable Discrete IN, 1 Configurable Analog IN, 1 Thermistor, 1 Async Counter, 1 SP	**Blank** = IP67 **L** = No LCD, no rotary dials

Used with		
T30UX	Long-range ultrasonic sensor	see bannerengineering.com
QT50ULB	Long-range ultrasonic sensor	see bannerengineering.com
M18T	Non-contact temperature sensor	see bannerengineering.com
TL70	Wireless modular tower light	see page 22

DX80 Performance P14 Specifications

Radio Range	900 MHz, 1 Watt: Up to 9.6 km (6 miles)	2.4 GHz, 65 mW: Up to 3.2 km (2 miles)
Minimum Separation Distance	900 MHz, 1 Watt: 4.57 m (15 ft)	2.4 GHz, 65 mW: 0.3 m (1 ft)
Radio Transmit Power	900 MHz, 1 Watt: 30 dBm (1 W) conducted (up to 36 dBm EIRP)	2.4 GHz, 65 mW: 18 dBm (65 mW) conducted, less than or equal to 20 dBm (100 mW) EIRP
Compliance	900 MHz Compliance (1 Watt) FCC ID UE3RM1809: This device complies with FCC Part 15, Subpart C,15.247 IC: 7044A-RM1809	2.4 GHz Compliance FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247 ETSI/EN: In accordance with EN 300 328: V1.8.1 (2012-06) IC: 7044A-DX8024
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)	
Link Timeout	Gateway: Configurable via User Configuration Tool (UCT) software Node: Defined by Gateway	
Operating Conditions	–40 to +85 °C (–40 to +185 °F) (Electronics); –20 to +80 °C (–4 to +176 °F) (LCD) 95% maximum relative humidity (non-condensing) Radiated Immunity: 10 V/m (EN 61000-4-3)	
Shock and Vibration	IEC 68-2-6 and IEC 68-2-27 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz	
Discrete Input	Rating: 3 mA max current at 30 V dc Sample / Report Rates: DIP switch configurable	
Discrete Input ON Condition	PNP: Greater than 8 V NPN: Less than 0.7 V	
Discrete Input OFF Condition	PNP: Less than 5 V NPN: Greater than 2 V or open	
Supply Voltage	3.6 V dc low power option from an internal battery	
Construction	Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers Integrated battery models: Weight: 0.30 kg (0.65 lbs) Non-battery models: Weight: 0.26 kg (0.57 lbs) Mounting: #10 or M5 (SS M5 hardware included) Max. Tightening Torque: 0.56 N·m (5 lbf·in)	
Antenna Connection	Ext. Reverse Polarity SMA, 50 Ohms Max Tightening Torque: 0.45 N·m (4 lbf·in)	
Interface	Indicators: Two bi-color LEDs Buttons: Two Display: Six character LCD	
Wiring Access	Two 1/2-inch NPT	
Switch Power Outputs	Analog configuration: one (SP1) Discrete configuration: one (SP1)	
Thermistor Input	Model: 44006, 44016, or 44031 Series of 10 kOhm thermistors Sample Rate: 16 seconds Report Rate: 64 seconds Accuracy: 0.4 °C (10 °C to 50 °C); Up to 0.8 °C (–40 °C to 85 °C)	
Counter Input	Event counter: Input rating 1 Hz to 10 kHz (For battery powered devices, the recommended input rating is less than 1 kHz) Rate (frequency) counter: 1 Hz to 10 kHz Threshold: 1.7 V	
Environmental Rating	IEC IP67; NEMA 6	
Certifications	CE	



Performance Series–P15E Nodes

The P15E Performance Node enables users to wirelessly power and control any connected devices and easily monitor device status and performance. It is easy to deploy and a simple way to remotely control lights, fans, motors, and other AC-powered devices without the trouble or expense of running cable.

Key Features:

- Switch AC loads up to 10 amps
- AC-power field-wireable
- No separate power supply required
- Supply voltage of 100 to 277 V AC at 50/60 Hz

Applications:

- Remotely control lights, dimming levels, fans, and motors
- Provide power and control connectivity to remote I/O devices

point-to-point

point-to-multipoint

star

	Device	Radio	Host Comms	Power	Antenna		I/O	Housing Options
DX80	N	9	X	7	S	–	P15	E
	N = Node	**9** = 900 MHz **2** = 2.4 GHz	**X** = None	**7** = 100 to 277 V ac	**S** = External		**P15** = 2 Selectable Discrete IN, 2 0 to 10 V Analog IN, 2 AC/DC relay (SPDT), 2 PNP Discrete OUT, 2 0 to 10 V Analog OUT	**E** = Environmental housing with internal battery

Used with

WLB92ZC1100ACT	Large, ultra-bright LED work light	
WLB32ZC1130QM	Adjustable LED workstation light	see bannerengineering.com
K50LGRYA120Q	50 mm colored domed indicator	

DX80 Performance -P15E Specifications

Radio Range	900 MHz, 1 Watt: Up to 9.6 km (6 miles)	2.4 GHz, 65 mW: Up to 3.2 km (2 miles)
Minimum Separation Distance	900 MHz, 1 Watt: 4.57 m (15 ft)	2.4 GHz, 65 mW: 0.3 m (1 ft)
Radio Transmit Power	900 MHz, 1 Watt: 30 dBm (1 W) conducted (up to 36 dBm EIRP)	2.4 GHz, 65 mW: 18 dBm (65 mW) conducted, less than or equal to 20 dBm (100 mW) EIRP
Compliance	900 MHz Compliance (1 Watt) FCC ID UE3RM1809: This device complies with FCC Part 15, Subpart C,15.247 IC: 7044A-RM1809	2.4 GHz Compliance FCC ID UE300DX80-2400 - This device complies with FCC Part 15, Subpart C, 15.247 ETSI/EN: In accordance with EN 300 328: V1.8.1 (2012-06) IC: 7044A-DX8024
Spread Spectrum Technology	FHSS (Frequency Hopping Spread Spectrum)	
Antenna Connection	Ext. Reverse Polarity SMA, 50 Ohms Max Tightening Torque: 0.45 N·m (4 lbf·in)	
Link Timeout	Gateway: Configurable via User Configuration Tool (UCT) software Node: Defined by Gateway	
Supply Voltage	Nominal voltage: 120–277 V ac at 60 Hz in North America Nominal voltage: 100–277 V ac at 50/60 Hz outside North America Maximum supply current: 0.37 A Maximum power consumption: 25 W	
Interface	Indicators: Two bi-color LEDs Buttons: Two Display: Six character LCD	
Construction	Polycarbonate housing and rotary dial cover; polyester labels; EDPM rubber cover gasket; nitrile rubber, non-sulphur cured button covers Weight: 0.51 kg (1.13 lbs) Mounting: 1/4-inch or M7 Max. Tightening Torque: 0.56 N·m (5 lbf·in)	
Wiring Access	Two 1/2-inch NPSM ports, 14 threads/inch (1/2-14 NPSM)	
Analog Input	0 to 10 V Input Rating: 10 V Impedance: Approximately 220 Ohms Sample Rate: 62.5 milliseconds Report Rate: 1 second or On Change of State (1% change in value) Accuracy: 0.2% of full scale +0.01% per °C Resolution: 12-bit	
Output State Following Timeout	De-energized (OFF)	
Relay Outputs	SPDT (Form C) relay 277 V ac, 10 A Minimum Mechanical Life: 10,000,000 Surge breakdown voltage (Between contacts and coil) (Initial): 10,000 V	
Analog Output	0 to 10 V Update Rate: 125 milliseconds Accuracy: 1.0% of full scale +0. 01% per °C Resolution: 12-bit	
Shock and Vibration	IEC 68-2-6 and IEC 68-2-27 Shock: 30g, 11 millisecond half sine wave, 18 shocks Vibration: 0.5 mm p-p, 10 to 60 Hz	
Operating Conditions	–40 °C to +85 °C (–40 °F to +185 °F) (Electronics); –20 °C to +80 °C (–4 °F to +176 °F) (LCD) 95% maximum relative humidity (non-condensing) Radiated Immunity: 10 V/m (EN 61000-4-3)	
Environmental Rating	IEC IP65	
Certifications	CE c UL us LISTED	