Ultrasonic Sensor for Wireless Level and Tank Monitoring

- Easily monitor remote or mobile tanks and totes
- Housing is designed for easy installation
- Completely wireless solution with 2+ year battery life at default sample rates
Monitor Tank Levels On Site or Remotely

- Provides a distance measurement from the target to the sensor
- Monitor wirelessly to avoid long cable runs
- Built-in temperature compensation for reliable measurement
- Threaded housing for easy installation

Select One Wireless Node

1-Wire Serial K50UX1ARA or K50UX1CRA
- 1-wire serial interface
- One ultrasonic sensor to one node with 1-wire serial interface
- One meter or three meter sensing range

Select One Modbus Radio

Modbus K50UX2ARA or K50UX2CRA
- Functions as a modbus slave device via RS-485
- Can be connected via a wireless or wired modbus network
- One meter or three meter sensing range

Ideal for monitoring portable tanks
Simple Monitoring
Q45U Node
- Easy-to-use without software
- Attractive price point
- LED for local indication
- Two AA lithium batteries

Monitor Many Sensors Over Long Distances
P6 Performance Node
- Expandable up to 47 Nodes
- Cover large areas with 900 MHz, 1 Watt power
- LCD screen displays register values
- D-cell lithium battery or 10 to 30 V dc

Monitor Many Sensors While Using Multiple Hops
H6 MultiHop
- Expandable up to 100 slave radios
- Use repeaters to extend range and circumvent obstacles
- Modbus host controller required
- D-cell lithium battery

Modbus Slave
MultiHop Modbus Slave with RS-485
- Connect to any modbus network
- Expandable up to 100 slave radios
- Use repeaters to extend range and circumvent obstacles
- Modbus host controller required

Modbus TCP/IP or Ethernet IP
DXM100
- PLC
- Local Wireless Network

Discrete and Analog Outputs
Performance or PM Gateway
- PLC
- Local Wireless Network

Serial Interface

Modbus TCP/IP or Ethernet IP
DXM100
- PLC
- Local Wireless Network

Designed to work with Sure Cross® Wireless Nodes and Data Radios
## K50U Ultrasonic Sensor

### Models Description

- **K50UX1ARA**
  - Ultrasonic sensor with 1-wire serial interface; 1 m sensing range
- **K50UX1CRA**
  - Ultrasonic sensor with 1-wire serial interface; 3 m sensing range
- **K50UX2ARA**
  - Ultrasonic sensor that functions as a modbus slave device via RS-485; 1 m sensing range
- **K50UX2CRA**
  - Ultrasonic sensor that functions as a modbus slave device via RS-485; 3 m sensing range

### Supply Voltage
- 3.6 to 5.5 V dc or 10 to 30 V dc

### Current
- Active comms: 11.3 mA at 30 V dc

### Indicators
- Two LEDs: Red and green

### Construction
- Housing: PBT polyester
- Transducer: epoxy/ceramic composite

### Resolution
- Resolution: 0.1% of distance (1.5 mm minimum)

### Sensor Connection
- 1¼” NPT connection

### Cable Connection
- Integral 5-pin M12/Euro-style male quick disconnect (QD)

### Environmental Rating
- NEMA 6P, IEC IP67

### Nodes with 1-Wire Serial Interface

<table>
<thead>
<tr>
<th>Models</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX80N9Q45U</td>
<td>Q45 Wireless Node with integrated battery</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80N2Q45U</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DX80N9X1S-P6</td>
<td>1-wire Serial Performance Node with integrated battery</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80N2X1S-P6</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DX80N9X6S-P6</td>
<td>1-wire Serial Performance Node 10 to 30 V dc</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80N2X6S-P6</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DX80DR9M-H6</td>
<td>1-wire Serial Modbus MultiHop Slave with integrated battery</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80DR2M-H6</td>
<td>2.4 GHz</td>
<td></td>
</tr>
</tbody>
</table>

See website for other models

### DXM100 Controller

<table>
<thead>
<tr>
<th>Models</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DXM100-B1R1</td>
<td>DXM100 Controller with DX80 Gateway preconfigured as a protocol converter</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DXM100-B1R3</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DXM100-B1R2</td>
<td>DXM100 Controller with MultiHop Data Radio</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DXM100-B1R4</td>
<td>2.4 GHz</td>
<td></td>
</tr>
</tbody>
</table>

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### MultiHop Modbus Radios

<table>
<thead>
<tr>
<th>Models</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX80DR9M-H</td>
<td>MultiHop Modbus Radio</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80DR2M-H</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DX80DR9M-H1E</td>
<td>MultiHop Modbus Radio with I/O — battery</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80DR2M-H1E</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DX80DR9M-HB1</td>
<td>MultiHop Modbus Radio with I/O — Board model</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80DR2M-HB1</td>
<td>2.4 GHz</td>
<td></td>
</tr>
</tbody>
</table>

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### PM Gateways (10-30 V dc)

<table>
<thead>
<tr>
<th>Models</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX80G9M6S-PM2</td>
<td>4 Discrete in, 4 Discrete out 2 Analog in, 2 Analog out</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80G2M6S-PM2</td>
<td>2.4 GHz</td>
<td></td>
</tr>
<tr>
<td>DX80G9M6S-PM8</td>
<td>6 Discrete in, 6 Discrete out</td>
<td>900 MHz</td>
</tr>
<tr>
<td>DX80G2M6S-PM8</td>
<td>2.4 GHz</td>
<td></td>
</tr>
</tbody>
</table>

See website for other models

### Accessories

#### Brackets
- **BWA-BK-006**
  - Mounts both the K50U Ultrasonic sensor and a Wireless Q45 Node

#### Cordsets

<table>
<thead>
<tr>
<th>Type</th>
<th>Length</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Pin M12/Euro-Style—Double-Ended</td>
<td>0.31 m (1 ft)</td>
<td>DEE2R-51D</td>
</tr>
<tr>
<td></td>
<td>0.91 m (3 ft)</td>
<td>DEE2R-53D</td>
</tr>
<tr>
<td></td>
<td>2.44 m (8 ft)</td>
<td>DEE2R-58D</td>
</tr>
</tbody>
</table>

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