

# SureCross<sup>®</sup> Wireless Q45 Temperature and Humidity Monitoring Solution



## Monitor temperature and humidity over long distances with ease.

The SureCross temperature and humidity monitoring solution provides a simple way to verify conditions in locations that were once too difficult to access via traditional monitoring methods. With no software required, you can replace cables and extend the range of temperature and humidity signals with minimal effort.

### Easy to Apply

- Wireless Q45 Sensor Node seamlessly integrates with the Temperature and Humidity Sensor
- B2T Gateway module customized to work with the Wireless Q45 Sensor
- Temperature and Humidity or Temperature only sensor to choose from

### Easy to Use

- No software needed
- Three DIP switch selectable temperature ranges
- Built-in red/green alarm indicator light

### Easy to Support

- LEDs for signal strength and operational status
- Advanced expandability via Modbus RTU

**sensing unplugged.<sup>™</sup>**

## Simple Temperature and Humidity Wire Replacement

### Battery Life

- Two years at factory default update rate

### Applications

- Coolers
- Clean rooms
- Controlled manufacturing environments
- Agriculture
- Storage facilities

### Easy to Deploy

1. Set DIP switches
2. Bind radios
3. Connect Temperature/Humidity Sensor

Just follow the *SureCross Wireless Quick Start Guide* (P/N 179843)



Deterministic  
PLC-Level Reliability



Signal Strength for  
Site Survey



Network IDs allow  
multiple systems  
to coexist



Noise Immune  
Frequency Hopping

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# Specifications

## Temperature and Humidity Sensor

<b>Models</b> M12FTH4Q – Temperature and relative humidity via a 1-wire serial interface M12FT4Q – Temperature via a 1-wire serial interface			
<b>Humidity</b>	Measuring Range: 0 to 100% humidity Resolution: 0.1% relative humidity Accuracy: ±2% relative humidity at 23 °C	<b>Indicators</b>	Green flashing: Power ON Red flashing: Serial Tx
<b>Temperature</b>	Measuring Range: -40 to 85 °C (-40 to +185 °F) Resolution: 0.1 °C	<b>Communication Protocol</b>	SureCross DX80 Sensor Node 1-Wire Serial Interface
<b>Mounting Connector</b>	M12 x 1 male Euro-style connector	<b>Rating</b>	IEC IP67; NEMA 6

## Wireless Q45 Sensor Node

<b>Models</b> DX80N2Q45TH – Wireless Q45 Serial Node for use with either: M12FTH4Q – Temperature and relative humidity via a 1-wire serial interface M12FT4Q – Temperature via a 1-wire serial interface			
<b>Radio Range</b>	2.4 GHz (65 mW): Up to 3.2 kilometers (2 miles) ISM Band World Wide Compliance	<b>Communication Protocol</b>	SureCross DX80 Sensor Node 1-Wire Serial Interface
<b>Spread Spectrum Technology</b>	FHSS (Frequency Hopping Spread Spectrum)	<b>Battery Life</b>	Two years at factory default update rate
<b>Serial Sensor Connector</b>	M12 x 1 female Euro-style connector	<b>Rating</b>	IEC IP67; NEMA 6P
<b>Indicators</b>	LEDs: Radio Function Red/green alarm indicator light	<b>Operating Conditions</b>	-40 °C to 85 °C (-40 °F to 185 °F); 90% relative humidity at 50 °C (non-condensing)

## Gateway

<b>Models</b> DX80G2M6-B2T – Gateway Module for Wireless Q45 Temperature and Humidity Sensor Node			
<b>Radio Range</b>	2.4 GHz (65 mW): Up to 3.2 kilometers (2 miles)* ISM Band World Wide Compliance	<b>Wiring Access</b>	Terminal block
<b>Spread Spectrum Technology</b>	FHSS (Frequency Hopping Spread Spectrum)	<b>Interface</b>	Indicators: One bi-color LED Buttons: One
<b>Power</b>	10 to 30 V dc	<b>Operating Conditions</b>	-40 °C to 85 °C (-40 °F to 185 °F); 95% relative humidity (non-condensing)

\* Line of sight with included 2 dB antenna.

## Simple Wire Replacement vs. Host Control via Modbus RTU

