



## Industrial Wireless Controller

- **Control wireless networks**, consolidate networks, create a network backbone
- **Programmable** to solve specific applications
- **Ethernet** and cellular connectivity
- **Send** alert messages
- **Create** local logs
- **Relay** register data to the cloud



The **DXM100** is an industrial wireless controller that facilitates Ethernet connectivity and Industrial Internet of Things (IIoT) applications



**Predictive Maintenance Monitoring:** monitor equipment to detect problems early and avoid additional damage and unplanned downtime

**Environmental Monitoring:** minimize material loss by monitoring temperature and humidity in climate controlled areas

**Productivity Solutions:** create call-for-parts/service and pick-to-light systems to increase productivity and reduce error

The DXM can provide visual indication, email or text notifications, collect the data, and send it to a host system or the cloud.



Visual Indication



Text or Email Notification



Data Logging

# DXM100 Features

## Connectivity

- Sure Cross® Wireless radio
  - 900 MHz & 2.4 GHz
- Cellular modem
- Ethernet
- Field Bus
  - RS485 Master & Slave
  - CAN

## Automation Protocols

- Modbus RTU
- Modbus TCP
- Ethernet/IP

## Data Logging

- Data/Event logging with email & text push
- Notifications, alerts, alarms
- IT system interface – HTTP API

## I/O

- Universal inputs
- Discrete outputs
- Courtesy power
- Switch power
- Battery backup
- Solar controller

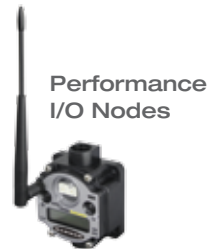
## User Interface

- User programmable LCD
  - Bind Sure Cross® Radios
  - Site survey
  - View sensor information
  - System status
- User defined LED indicators

## Logic Controller

- Action rules
  - Supports simple logic, arithmetic, and thresholding
  - Low complexity solutions
- Text language
  - ScriptBasic
  - Medium complexity solutions
- Scheduler
  - Time/calendar-based events
  - Astronomical clock

# Compatible Wireless Products



Performance I/O Nodes



MultiHop Modbus I/O



Q45 Wireless Nodes

## Temperature & Humidity Sensors



M12FT4Q  
M12FTH4Q  
M12FT3Q  
M12FTH3Q

## Vibration & Temperature Sensors



QM42VT1  
QM42VT2

## Wireless Tower Lights



TL70 Wireless Modular Tower Light

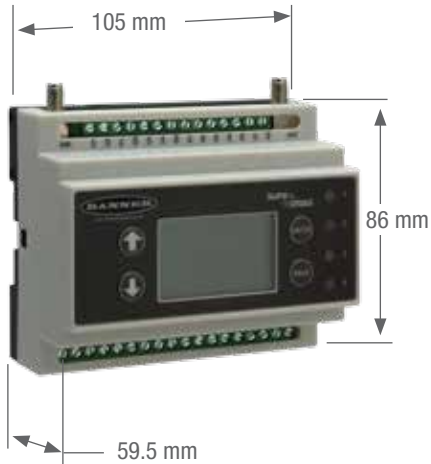
## Vehicle Detection Sensors



Ultrasonic Sensor Node  
M-GAGE Sensor Node




DXM100  
Controller



Models	Description	Frequency
DXM100-B1R1	DXM100 Controller with DX80 Gateway – preconfigured as a protocol converter	900 MHz
DXM100-B1R3	DXM100 Controller with DX80 Gateway – preconfigured as a protocol converter	2.4 GHz
DXM100-B1R2	DXM100 Controller with MultiHop Data Radio	900 MHz
DXM100-B1R4	DXM100 Controller with MultiHop Data Radio	2.4 GHz

<b>Supply Voltage</b>	12 to 30 V dc or 12 V dc solar panel and 12 V sealed lead acid battery
<b>Power Consumption</b>	35 mA average at 12 V
<b>Radio Range*</b>	900 MHz, 1 Watt: Up to 9.6 km (6 miles) 2.4 GHz, 65 mW: Up to 3.2 km (2 miles)
<b>Logging</b>	8 GB maximum; removable Micro SD card format
<b>Protocols</b>	Modbus RTU Master/Slave, Modbus/TCP, and Ethernet/IP
<b>Construction</b>	Polycarbonate; DIN rail mount option
<b>Universal Inputs</b>	Sinking/sourcing discrete, 4–20 mA analog, 0–10 V analog, counter, temperature 10 kOhm thermistor
<b>Courtesy Power</b>	One; Output at 5 V, 500 mA maximum

<b>Switched Power Outputs</b>	5 V/400 mA max; 16 V/125 mA max
<b>Analog Outputs (DAC)</b>	0 to 20 mA or 0 to 10 V dc output Accuracy: 0.1% of full scale +0.01% per °C Resolution: 12-bit
<b>NMOS Outputs</b>	Less than 1 A max current at 30 V dc ON-State Saturation: Less than 0.7 V at 20 mA ON Condition: Less than 0.7 V OFF Condition: Open
<b>Cerifications</b>	

\*Radio range is with the 2 dB antenna that ships with the product. High-gain antennas are available, but the range depends on the environment and line of sight. To determine the range of your wireless network, perform a Site Survey.  
\*\*Refer to the Sure Cross® Wireless I/O Networks Instruction Manual (p/n 132607) for installation and waterproofing instructions.

## Accessories



**PSD-24-4**  
DC power supply – desktop style,  
24V dc 4A, Euro 4-pin connector



**PSDINP-24-13**  
DC power supply DIN rail mount,  
24 - 28V dc, 1.3A



**MQDMC-401**  
Euro-style male quick disconnect cable,  
4-Pin straight connector



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