DXM Series

IIoT Gateway 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

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End-to-End IIoT Solutions

The DXM Series Gateway/Controller enables end-to-end IIoT solutions, connecting Banner sensors to Banner's Connected Data Solutions (CDS) cloud platform. The DXM can push data to Banner CDS where it can be easily consumed with intuitive, customizable dashboards; it can log data for immediate or long-term analysis; and it can send instant alerts and alarms when corrective actions are needed.

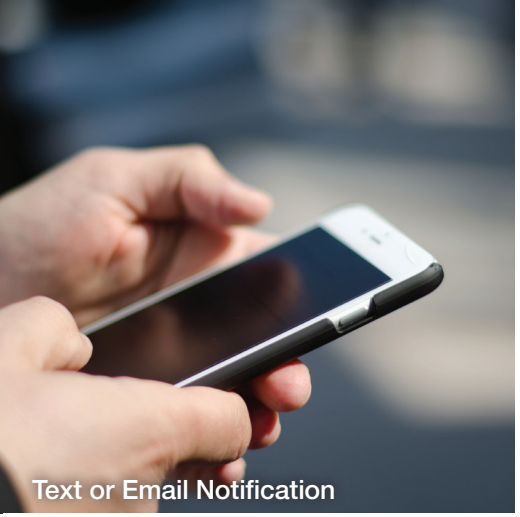
- The DXM Series integrates Banner's ISM radio, cellular connectivity, and local I/O
- Program the DXM using action rules and ScriptBasic language, which can execute concurrently
- Log data on the Micro SD card
- Automation protocols include Modbus RTU, Modbus/TCP, and EtherNet/IP for communications with PLC's, HMI's, or other local hosts
- Interactive programmable user interface with LCD and LED indicators
- Industry standard RS-485, Ethernet, and USB communication ports
- Easily interfaces with Banner CDS and other cloud service providers

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



Standard Features	DXM1200-B1	DXM1000-B1	DXM700-B1	DXM100-Bx	DXM150-B2	DXM150-B1
Performance or MultiHop Radio option	✓	✓	✓	✓	✓	✓
900 MHz or 2.4 GHz ISM Radio option	✓	✓	✓	✓	✓	✓
Cellular communications option	✓	✓	✓	✓	✓	✓
LCD User Interface and 4 LEDs	✓	✓	✓	✓	✓	✓
8GB Removable Micro SD Card	✓	✓	✓	✓	✓	✓
Environmental Rating	IP67	IP20	IP20	IP20	IP20	IP20
Battery backup option		✓		✓	✓	✓
Solar power option		✓		✓	✓	✓
Modbus/TCP and Ethernet/IP	✓	✓	✓	✓	✓	✓
Modbus RTU RS-485	✓	✓	✓	✓	✓	✓
RS-232		✓		✓	✓	✓
CANBus		✓		✓	✓	✓
USB and Ethernet Configuration	✓	✓	✓	✓	✓	✓
Logic Controller (Action rule or ScriptBasic programmable)	✓	✓	✓	✓	✓	✓
SMS Capability				✓	✓	✓
Slave Option (IO Board and Radio Only)				✓	✓	✓
Processor Speed and Memory	300 MHz/16 MB	300 MHz/16 MB	300 MHz/16 MB	100 MHz/2 MB	100 MHz/2 MB	100 MHz/2 MB
Sinking (NPN)/Sourcing (PNP) Outputs					8	
Sinking (NMOS) Outputs (up to 30 V dc at <1 A max)		4	4	4		4
Analog Outputs (0–20 mA or 0–10 V dc, 12-bit resolution)		2		2	2	2
Relay Outputs (SPDT Form C - 250 V ac 16 A)						2
Universal Inputs (NPN, PNP, 0–20mA, 0–10 V, 10K Thermistor, Potentiometer, NPN Raw Fast)		4		4	8	8
Optically Isolated Discrete Inputs (30 V ac or V dc up to 2.5 kV isolation)					2	2
Courtesy Power Out		1 (5 V, 500 mA max)		1 (5 V, 500 mA max)	4 (2.7 V up to device power)	2 (2.7 V up to device power)
Switched Power Out		2 (5 V, 400 mA max or 16 V, 125 mA max)		2 (5 V, 400 mA max or 16 V, 125 mA max)		
DIN Rail Width		105 mm	70 mm	105 mm	155 mm	155 mm

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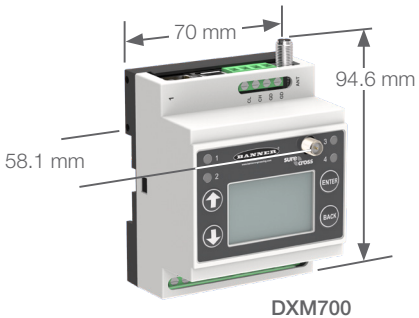
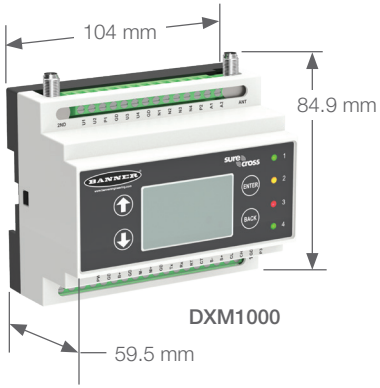
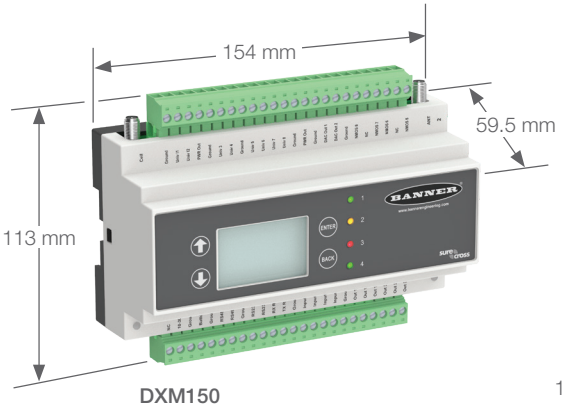


DXM700



DXM1000



DXM150

DXM1200

Controller Models*

Models	Description	Frequency
DXM700–B1R1	DXM700 Controller with Performance Series Gateway	900 MHz
DXM700–B1R2	DXM700 Controller with MultiHop Modbus Data Radio	900 MHz
DXM700–B1R3	DXM700 Controller with Performance Series Gateway	2.4 GHz
DXM700–B1R4	DXM700 Controller with MultiHop Modbus Data Radio	2.4 GHz
DXM1000–B1R1	DXM1000 Controller with Performance Series Gateway	900 MHz
DXM1000–B1R2	DXM1000 Controller with MultiHop Modbus Data Radio	900 MHz
DXM1000–B1R3	DXM1000 Controller with Performance Series Gateway	2.4 GHz
DXM1000–B1R4	DXM1000 Controller with MultiHop Modbus Data Radio	2.4 GHz
DXM150–B1R1	DXM150 Controller with Performance Series Gateway	900 MHz
DXM150–B1R2	DXM150 Controller with MultiHop Modbus Data Radio	900 MHz
DXM150–B1R3	DXM150 Controller with Performance Series Gateway	2.4 GHz
DXM150–B1R4	DXM150 Controller with MultiHop Modbus Data Radio	2.4 GHz
DXM1200–B1R1	DXM1200 Controller with DX80 ISM 900 MHz Radio	900 MHz
DXM1200–B1R2	DXM1200 Controller with DX80 ISM 900 MHz MultiHop Radio	900 MHz
DXM1200–B1R3	DXM1200 Controller with DX80 ISM 2.4 GHz Radio	2.4 GHz
DXM1200–B1R4	DXM1200 Controller with DX80 ISM 2.4 GHz MultiHop Radio	2.4 GHz

* For additional models and cellular data plans go to bannerengineering.com

Connected Data Soutions (CDS) Software Packages

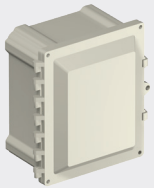
Models	Description
806252	Starter Package 1,000 Data Points per hour Total Storage: 2 million Data Points
806253	Standard Package 4,000 Data Points per hour Total Storage: 20 million Data Points
806254	Premium Package 12,000 Data Points per hour Total Storage: 100 million Data Points

Accessories

PSW-24-1
DC power supply – Wall mount, 24V dc 1A, Euro-style 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



BWA-AH12106
enclosure

SXI-LTE-001
Cellular Data Modem Verizon 4G LTE Cat. 1

SXI-GSM-001
Cellular Data Modem Worldwide HSPA 3G with 2G GSM fallback

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1-888-373-6767
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