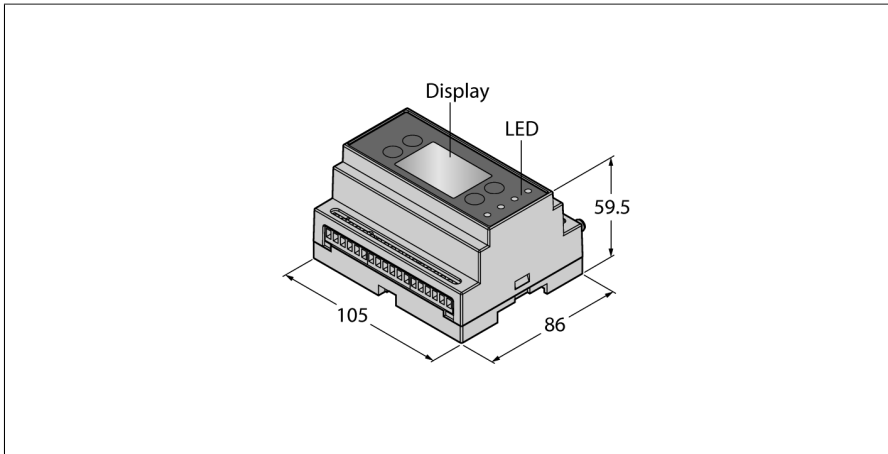


# Network Controller With Integrated 2.4-GHz Data Radio Modbus RTU and Ethernet Interface DXM100-B2R4



- Integrated signal strength indicator
- Configuration via DIP switch and software
- LCD display and configurable LEDs
- DX80 Data radio functionalities
- Logic functions, supports ScriptBasic
- Email and cloud function, timing and data logger
- Alternative registry assignments
- Operating voltage: 12...30 VDC or battery operation
- Inputs: 4 × configurable (analog/discrete)
- Outputs: 4 × NMOS, 2 × 0...10 V, 2 × switch power
- Interfaces: RS232, RS485, Ethernet, USB
- Protocols: Modbus RTU, EtherNet/IP, Modbus TCP, PROFINET, CAN

Type	DXM100-B2R4
ID	3803303

Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Tree topology Star topology
Function	Tree topology
Device type	Node Network controller
Frequency band	2.4-GHz ISM band
Frequency range	2.402 - 2.483 GHz
Number of radio channels	50
Channel width	1 MHz
Spread spectrum technology	FHSS (Frequency Hopping Spread Spectrum)
Single-Carrier Residence Time	20 ms
Response time typical	< 40 ms
Output power ERP	18 dB/65 mW
Output power EIRP	20 dB/100 mW

I/O data	
Number of channels	4/1
Input type	NPN/PNP/0...20 mA/0...10 V/10k thermistor/counter/SDI-12
Number of channels	4/2
Output type	NMOS/0...10 V
Communication protocol	RS485 Modbus RTU EtherNet/IP Modbus TCP PROFINET

### Functional principle

In addition to the organization of a DX80 wireless network, the DXM network controller offers, as a gateway or data radio master, a variety of functions. This small control unit works with various bus protocols and allows the processing of data with logic functions, timed actions and registry manipulations. Data can be logged on an internal SD card, emails can be sent via Ethernet if necessary, etc. The controller is set via PC software and can be configured for the wireless network with the familiar tools UCT or MCT of the DX80 series.

### Norms:

FCC-ID UE300DX80-2400- This device complies with FCC para. 15, subpara. C, 15.247  
 ETSI/EN: In compliance with EN 300 328: V2.2.2 (2019-02)  
 IC: 7044A-DX8024  
 Radiation protection 10 V/m for 80–2700 MHz acc. to EN 61000-6-2  
 Shock and vibration resistance: IEC 68-2-6 and IEC 68-2-7

Electrical data	
Runs with battery	No
Operating voltage $U_s$	12...30 VDC
DC rated operating current $I_s$	$\leq 35$ mA
Power-on indication	LED, Green

Mechanical data	
Design	Rectangular, DXM100
Housing material	Plastic, PC, Grey
Electrical connection	Screw terminals
Antenna connection	RP-SMA female connector
Ambient temperature	-20...+60 °C
Storage temperature	-20...+60°C
Protection class	IP20

#### Tests/approvals

## Function accessories

Type code	Ident no.		Dimension drawing
BWA-2O6-A	3081081	External antenna 6 dBi, N-female	
BWA-2O8-A	3081080	External antenna 8.5 dBi, N-female	
BWA-2O2-C	3077816	Internal antenna 2 dBi, RP-SMA male, standard	
BWA-2O5-C	3077817	Internal antenna 5 dBi, RP-SMA male	
BWA-2O7-C	3077818	Internal antenna 7 dBi, RP-SMA male	

## Function accessories

Type code	Ident no.		Dimension drawing
DX80DR2M-H2	3013105	Data Radio, 2.4 GHz, external antenna, RS485 interface, inputs: 4 × PNP 2 × 0...20 mA, outputs: 4 × PNP 2 × 0...20 mA	