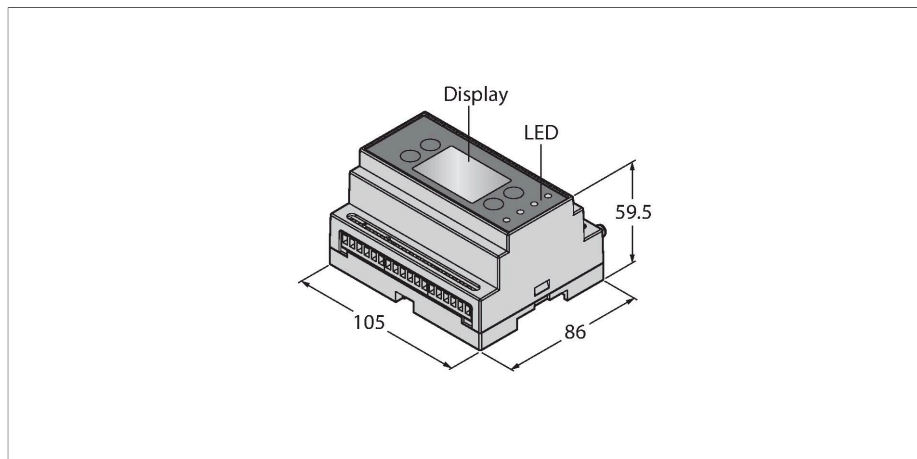


DXM100-B1R4

Network Controller – With Integrated 2.4-GHz Data Radio

Modbus RTU and Ethernet Interface



Features

- 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 × 4...20 mA/0...10 V, 2 × switch power
- Interfaces: RS232, RS485, Ethernet, USB
- Protocols: Modbus RTU, EtherNet/IP, Modbus TCP, PROFINET, CAN

Technical data

Type	DXM100-B1R4
ID	3800138
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
Range	3200000 mm
I/O data	
Number of channels	4
Input type	NPN/PNP/0...20 mA/0...10 V/10k thermistor/counter
Number of channels	4/2
Output type	NMOS/0...20 mA or 0...10 V

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.


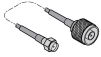
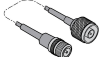
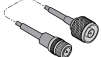
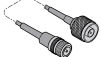
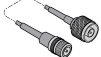

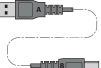
Norms:
 FCC-ID UE300DX80-2400- This device complies with FCC para. 15, subpara. C, 15.247
 ETSI/EN: In compliance with EN 300 328: V2.2.2 (2019-02)
 IC: 7044A-DX8024
 Radiation protection 10 V/m for 80–2700 MHz acc. to EN 61000-6-2
 Shock and vibration resistance: IEC 68-2-6 and IEC 68-2-7

Technical data

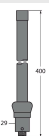
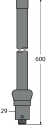
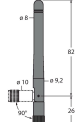
Communication protocol	EtherNet/IP Modbus TCP Modbus RTU RS232 RS485
Electrical data	
Runs with battery	No
Operating voltage U_B	12...30 VDC
DC rated operating current I_o	≤ 35 mA
Power-on indication	LED, Green
Mechanical data	
Design	Rectangular, DXM100
Dimensions	86 x 105 x 59.45 mm
Housing material	Plastic, PC, Grey
Electrical connection	Screw terminals
Antenna connection	RP-SMA female connector
Ambient temperature	-20...+80 °C
Storage temperature	-20...+60 °C
Relative humidity	0...95 %
Protection class	IP20
Tests/approvals	

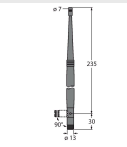
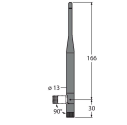
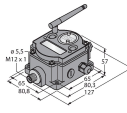
Accessories

Dimension drawing	Type	ID	
<p>Keine Maßzeichnung vorhanden! No drawing available!</p> 	BWC-LMRSFRPB	3079296	Surge protection, bulkhead fitting, RP-SMA type
	BWC-LFNBMN	3078548	Surge protection, bulkhead fitting, N-type
	BWC-1MRSFRSB0.2	3078544	Antenna extension, RP-SMA on RP-SMAF bulkhead fitting, 0.2m, RG58, loss 1.05 dB/m
	BWC-1MRSFRSB1	3078337	Antenna extension, RP-SMA on RP-SMAF bulkhead fitting, 1 m, RG58, loss 1.05 dB/m
	BWC-1MRSFRSB2	3078338	Antenna extension, RP-SMA on RP-SMAF bulkhead fitting, 2m, RG58, loss 1.05 dB/m
	BWC-1MRSFRSB4	3077488	Antenna extension, RP-SMA on RP-SMAF bulkhead fitting, 4m, RG58, loss 1.05 dB/m

Dimension drawing	Type	ID	
	BWC-1MRSMN05	3077486	Antenna extension, RP-SMA on N-male, 0.5 m, RG58, loss 0.56 dB/m
	BWC-1MRSMN2	3077820	Antenna extension, RP-SMA on N-male, 2m, RG58, loss 0.56 dB/m
	BWC-4MNFN3	3077489	Antenna extension, N male connector to N female connector, cable length: 3 m, LMR400, coaxial, loss: 0.22 dB/m
	BWC-4MNFN6	3077490	Antenna extension, N-male on N-female, 6m, LMR400, coaxial, loss 0.22 dB/m
	BWC-4MNFN15	3077821	Antenna extension, N-male on N-female, 15 m, LMR400, coaxial, loss 0.22 dB/m
	BWC-4MNFN30	3077822	Antenna extension, N-male on N-female, 30m, LMR400, coaxial, loss 0.22 dB/m
	RJ45S-RJ45S-4414-0.5M	6441421	
	USB 2.0 CABLE 1.8M	6827387	

Accessories

Dimension drawing	Type	ID	
	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

Dimension drawing	Type	ID	
	BWA-205-C	3077817	Internal antenna 5 dBi, RP-SMA male
	BWA-207-C	3077818	Internal antenna 7 dBi, RP-SMA male
	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