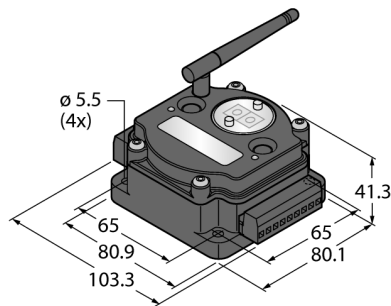


Radio Transmission System

Star Topology

Gateway

DX80G2M6S-P2C



Type	DX80G2M6S-P2C
ID	3018788
Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Star topology
Function	Star topology
Device type	Gateway
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	7.8 ms
Response time typical	< 62.5 ms
Output power ERP	18 dB/65 mW
Output power EIRP	20 dB/100 mW
I/O data	
Number of channels	4 / 2
Input type	PNP/0...10 V or 0...20 mA
Number of channels	4 / 2
Output type	PNP/0...10 V or 0...20 mA
Communication protocol	Modbus RTU RS485
Electrical data	
Runs with battery	No
Operating voltage U_s	10...30 VDC
DC rated operating current I_s	≤ 60 mA
Power-on indication	LED, Green

- External antenna (RG58 RP-SMA connection)
- External terminal strip
- Integrated signal strength indicator
- Configuration via DIP switch
- Modbus RTU communication, RS485 interface
- Deterministic data transmission
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- Transmission power: 63 mW, 18 dBm conducted, ≤ 20 dBm EIRP
- Alternative register assignment
- Inputs: 4 x PNP, 2 x 0...20 mA or 0...10 V
- Outputs: 4 x PNP, 2 x 0...20 mA or 0...10 V
- Power consumption: < 60 mA at 24 VDC

Functional principle

The DX80 system forms a radio-based network for wireless, bidirectional transmission of sensor signals in a star topology. It consists of a gateway that transmits the I/O signals to the control system and to as many as 47 nodes, with each node taking up to 12 sensors/actuators. The system is configured via the gateway with the included software. You can supply different components with DC voltage either via the power grid or self-sufficiently via battery or solar cell. Depending on the type of gateway used, simultaneous transmission of different measured and switching values is possible as well as communication via RS485 interface.

Norms:

Mechanical data		FCC-ID UE300DX80-2400- This device complies with FCC para. 15, subpara. C, 15.247
Design	Rectangular, DX80	ETSI/EN: In compliance with EN 300 328: V2.2.2 (2019-02)
Housing material	Plastic, PC	IC: 7044A-DX8024
Antenna connection	RP-SMA female connector	Radiation protection 10 V/m for 80–2700 MHz acc. to EN 61000-6-2
Ambient temperature	-40...+85 °C	Shock and vibration resistance: IEC 68-2-6 and IEC 68-2-7
Relative humidity	0...95%	
Protection class	IP20	
Tests/approvals		
Approvals	ATEX II 3 G	
Approvals	CE	
	CSA	
	ATEX	
Device marking	II 3 G Ex nA IIC T4 Gc	
Ex approval acc. to conformity certificate	LCIE 10 ATEX 1012 X	

Accessories

Type code	Ident no.		Dimension drawing
SMBDX80DIN	3077161	Mounting panel for DIN rail, suited for CP80, DX80, K80, Q80, operating temperature: -20...90 °C	

Function accessories

Type code	Ident no.		Dimension drawing
BWA-206-A	3081081	External antenna 6 dBi, N-female	
BWA-208-A	3081080	External antenna 8.5 dBi, N-female	
BWA-202-C	3077816	Internal antenna 2 dBi, RP-SMA male, standard	
BWA-205-C	3077817	Internal antenna 5 dBi, RP-SMA male	

Function accessories

Type code	Ident no.		Dimension drawing
BWA-207-C	3077818	Internal antenna 7 dBi, RP-SMA male	