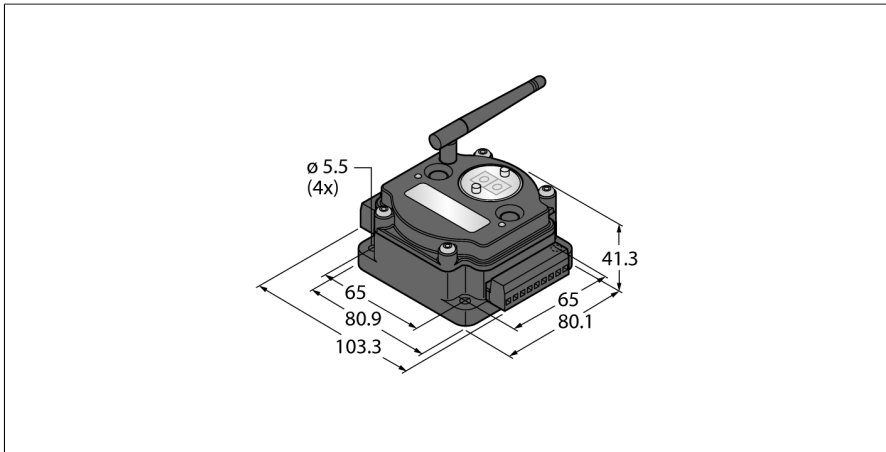


# Radio Transmission System Star Topology Gateway DX80G2M6S-P2C



Type	DX80G2M6S-P2C
ID	3018788
<b>Wireless data</b>	
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
<b>I/O data</b>	
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
<b>Electrical data</b>	
runs with battery	nein
Operating voltage	10...30 VDC
DC rated operational current	≤ 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	
Design	Rectangular, DX80
Housing material	Plastic, PC
Antenna connection	RP-SMA female connector
Ambient temperature	-40...+85 °C
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

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

## 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-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	

**Function accessories**

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