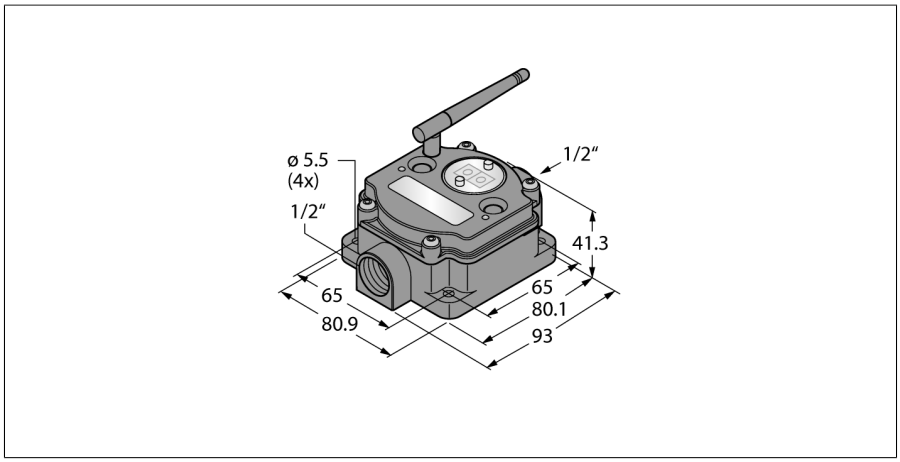
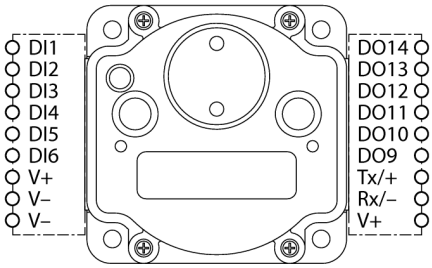
Radio Transmission System
Point-to-point
Node
DX80N2X6S-PM8L



- External antenna (RG58 RP-SMA connection)
- Without LCD display
- Configuration via DIP switch
- Deterministic data transmission
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- Transmission power: 63 mW, 18 dBm conducted, ≤ 20 dBm EIRP
- Inputs: 6 x PNP
- Outputs: 6 x PNP
- Power consumption: < 60 mA at 24 VDC

Type	DX80N2X6S-PM8L
ID	3087095
Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Point-to-point Point-to-point with repeater
Function	Point-to-point
Device type	Node
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	6
Input type	PNP
Number of channels	6
Output type	PNP
Electrical data	
Runs with battery	No
Operating voltage U_B	10…30 VDC
DC rated operating current I_e	≤ 60 mA

Wiring Diagram



Functional principle

The DX80-PM system forms a radio-based point-to-point link for the transmission of sensor signals, consisting of a gateway and a node. Up to 12 sensors/actuators can be connected per device and the system transfers both switching and analog signals bidirectionally. The IO image is selected via the gateway menu. If required, a second node can be added and the gateway can be used as a repeater. The connection quality can be checked via the menu.

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

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Mechanical data	
Design	Rectangular, DX80-PM
Housing material	Plastic, PC
Antenna connection	RP-SMA female connector
Ambient temperature	-40…+85 °C
Relative humidity	0…95%
Protection class	IP67

Tests/approvals

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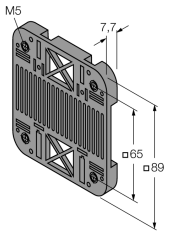
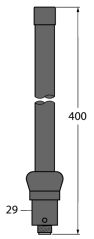
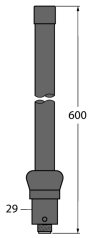
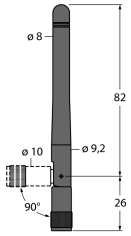
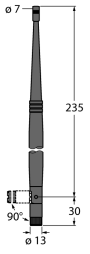
Accessories

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	

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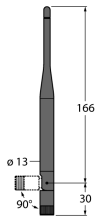
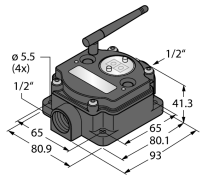
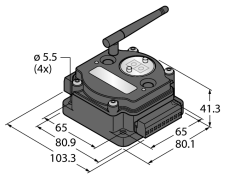
Function accessories

Type code	Ident no.		Dimension drawing
BWA-2O7-C	3077818	Internal antenna 7 dBi, RP-SMA male	
DX80G2M6S-PM8	3087099	Point to point transmission, gateway, external antenna, digital signals	
DX80G2M6S-PM8C	3087103	Point to point transmission, gateway, external antenna, digital signals, IP20	

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