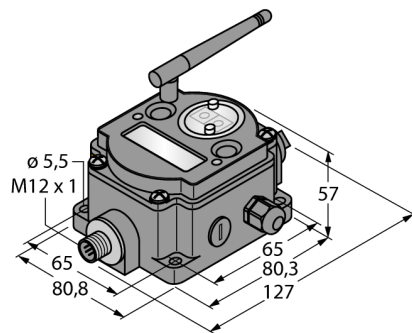


Radio Transmission System

Star Topology

Gateway

DX80G2M6-Q



- External antenna (RG58 RP-SMA connection)
- Integrated signal strength indicator
- Configuration via DIP switch
- Modbus RTU communication, RS485 interface
- Selectable connection of DX80 nodes and/or Q45 sensors
- 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

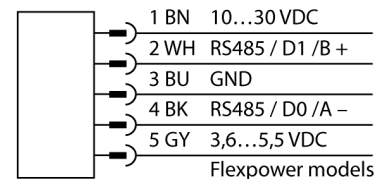
Type	DX80G2M6-Q
ID	3025894

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	6
Input type	PNP
Number of channels	6
Output type	PNP
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

Wiring Diagram



Functional principle

DX80 gateway for connection of Q45 wireless sensors. Networked in star topology. DX80 nodes can also be used alongside the Q45 sensors. Depending on the number of Q45 sensors used, a switching output and an alarm output is provided on the gateway for each Q45 sensor. When connected to Modbus RTU, up to 47 of these nodes can be coupled. In all other aspects, the network behaves like a normal DX80 network.

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

Mechanical data

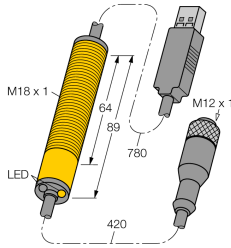
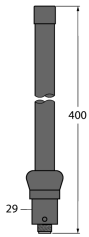
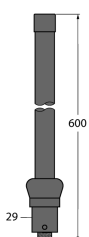
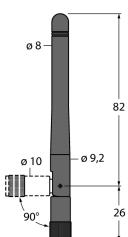
Design	Rectangular, DX80
Housing material	Plastic, PC
Antenna connection	RP-SMA female connector
Ambient temperature	-20...+80 °C
Relative humidity	0...95%
Protection class	IP67

Tests/approvals

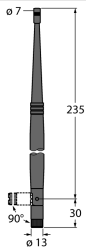
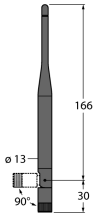
Accessories

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-HW-006	3081325	Converter cable, RS485 to USB 2.0 converter, female connector, M12 × 1, 5-pin, male connector, USB type A, length 1 m; supplies the connected device with 10 V. An external power supply via a Y-splitter (6634679) is recommended for the connected device	
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	

Function accessories

Type code	Ident no.		Dimension drawing
BWA-2O5-C	3077817	Internal antenna 5 dBi, RP-SMA male	 The drawing shows a vertical antenna with a tapered top. The top diameter is labeled as $\phi 7$. The main body has a diameter of $\phi 13$. The total height is 235. The mounting flange has a diameter of 30 and a 90° angle.
BWA-2O7-C	3077818	Internal antenna 7 dBi, RP-SMA male	 The drawing shows a vertical antenna with a tapered top. The top diameter is labeled as $\phi 7$. The main body has a diameter of $\phi 13$. The total height is 166. The mounting flange has a diameter of 30 and a 90° angle.