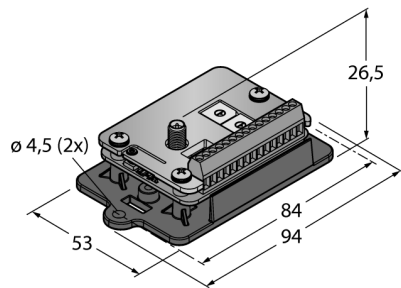


Radio Transmission System

Star Topology

Node (FlexPower)

DX80N2X2S-PB1



- External antenna (RG58 RP-SMA connection)
- External terminal strip
- Integrated signal strength indicator
- Configuration via DIP switch
- Deterministic data transfer
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- Transmission power: 63 mW, 18 dBm conducted, ≤ 20 dBm EIRP
- External battery supply or 10...30VDC
- Inputs: 2 x NPN, 2 x 0...20 mA
- Outputs: 2 x NMOS

Type	DX80N2X2S-PB1
ID	3025758
Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Star topology
Function	Star topology
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	< 1000 ms
Output power ERP	18 dB/65 mW
Output power EIRP	20 dB/100 mW
I/O data	
Number of channels	2 / 2
Input type	NPN/0...20 mA
Number of channels	2
Output type	NMOS
Electrical data	
Runs with battery	Yes
Operating voltage U_s	3.6...5.5 VDC
Power-on indication	LED, Green

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:

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

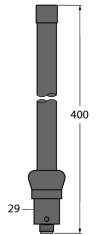
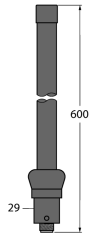
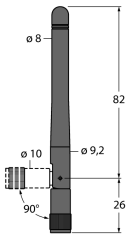
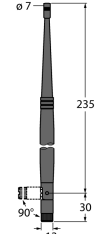
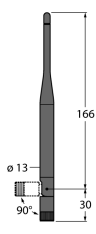
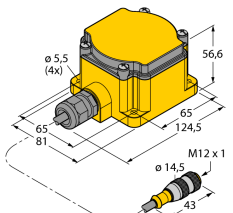
Mechanical data

Design	Rectangular, DX80
Housing material	Plastic, FR4 circuit board
Antenna connection	RP-SMA female connector
Ambient temperature	-40...+85 °C
Relative humidity	0...95%
Protection class	IP00

Tests/approvals

Approvals	ATEX II 3 G
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Function accessories

Type code	Ident no.		Dimension drawing
BWA-206-A	3081081	External antenna 6 dBi, N-female	 A vertical antenna with a total height of 400 mm. The base has a diameter of 29 mm.
BWA-208-A	3081080	External antenna 8.5 dBi, N-female	 A vertical antenna with a total height of 600 mm. The base has a diameter of 29 mm.
BWA-202-C	3077816	Internal antenna 2 dBi, RP-SMA male, standard	 A vertical antenna with a total height of 82 mm. The base has a diameter of 10 mm and a 90-degree bend. The main body has a diameter of 8 mm and a section with a diameter of 9.2 mm.
BWA-205-C	3077817	Internal antenna 5 dBi, RP-SMA male	 A vertical antenna with a total height of 235 mm. The base has a diameter of 13 mm and a 90-degree bend. The main body has a diameter of 7 mm and a section with a diameter of 13 mm.
BWA-207-C	3077818	Internal antenna 7 dBi, RP-SMA male	 A vertical antenna with a total height of 166 mm. The base has a diameter of 13 mm and a 90-degree bend. The main body has a diameter of 13 mm and a section with a diameter of 13 mm.
DX81-LITH	3086016	Battery Case incl. XL-205F Battery	 A yellow battery case with a total height of 56.6 mm. The base has a diameter of 14.5 mm and a 90-degree bend. The main body has a diameter of 5.5 mm (4x) and a section with a diameter of 14.5 mm. The case is labeled M12 x 1.

Function accessories

Type code	Ident no.		Dimension drawing
DX81-LITH-NB	3086018	Battery case; Recommended Battery XL-205F	