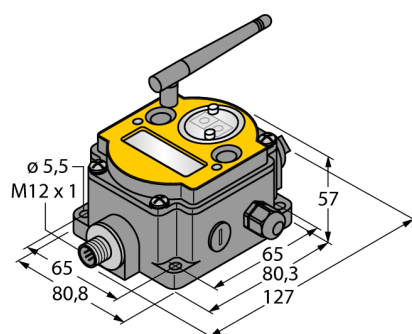


Radio Transmission System

Star Topology

Node (FlexPower)

DX80N2X2S-P1



Type	DX80N2X2S-P1
ID	3017532

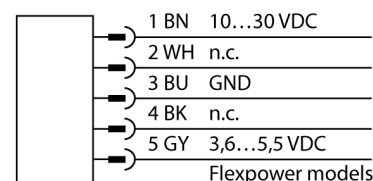
Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Star topology
Function	Star topology
Device type	Node
Frequency band	2.4-GHz ISM band
Frequency range	2.402 - 2.483 GHz
Number of radio channels	50
Channel width	1 MHz
Spread spectrum technology	FHSS (Frequency Hopping Spread Spectrum)
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	2/4
Input type	PNP(NPN)/0...20 mA (0...10 V)
Number of channels	2
Output type	NMOS

Electrical data	
runs with battery	ja
Operating voltage	3.6...5.5 VDC
Power-on indication	LED, Green

- External antenna (RG58 RP-SMA connection)
- 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
- Digital/Analog mode, adjustable
- Inputs: 2 x NPN(PNP), 2 x thermistor
- Inputs: 2 x 4...20 mA (0...10V) only in analog mode
- Outputs: 2 x NMOS, 2 x switch power (digital mode), 1 x switch power (analog mode)
- Switch Power adjustable to constant voltage
- Operating voltage: 3.6 VDC
- Battery power supply: DX81-NB with XL-200F
- Frequency: 2.4 - 2.4835 GHz ISM band
- Transmission power: 18 dBm conducted, ≤ 20 dBm EIRP
- Spread spectrum: FHSS (Frequency Hopping Spread Spectrum)

Wiring Diagram



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.

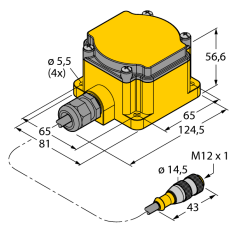
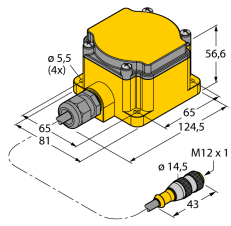
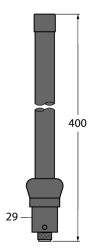
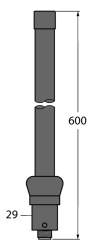
Norms:

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	-20...+80 °C	Shock and vibration resistance: IEC 68-2-6 and IEC 68-2-7
Relative humidity	0...95%	
Protection class	IP67	
Tests/approvals		

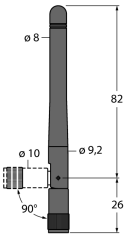
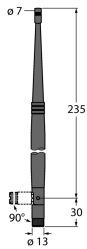
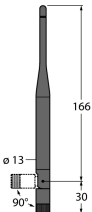
Accessories

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
DX81-LITH	3086016	Battery Case incl. XL-205F Battery	
DX81-LITH-NB	3086018	Battery case; Recommended Battery XL-205F	
BWA-206-A	3081081	External antenna 6 dBi, N-female	
BWA-208-A	3081080	External antenna 8.5 dBi, N-female	

Function accessories

Type code	Ident no.		Dimension drawing
BWA-2O2-C	3077816	Internal antenna 2 dBi, RP-SMA male, standard	 Technical drawing of the BWA-2O2-C antenna. It is a vertical, cylindrical antenna with a flared top. Dimensions include a top diameter of $\varnothing 8$, a main body diameter of $\varnothing 9,2$, and a base diameter of $\varnothing 10$. The total height is 82, and the height of the base section is 26. A 90° angle is indicated at the base.
BWA-2O5-C	3077817	Internal antenna 5 dBi, RP-SMA male	 Technical drawing of the BWA-2O5-C antenna. It is a vertical, tapered antenna. Dimensions include a top diameter of $\varnothing 7$, a total height of 235, and a base diameter of $\varnothing 13$. A 90° angle is indicated at the base.
BWA-2O7-C	3077818	Internal antenna 7 dBi, RP-SMA male	 Technical drawing of the BWA-2O7-C antenna. It is a vertical, tapered antenna. Dimensions include a top diameter of $\varnothing 13$, a total height of 166, and a base diameter of $\varnothing 13$. A 90° angle is indicated at the base.