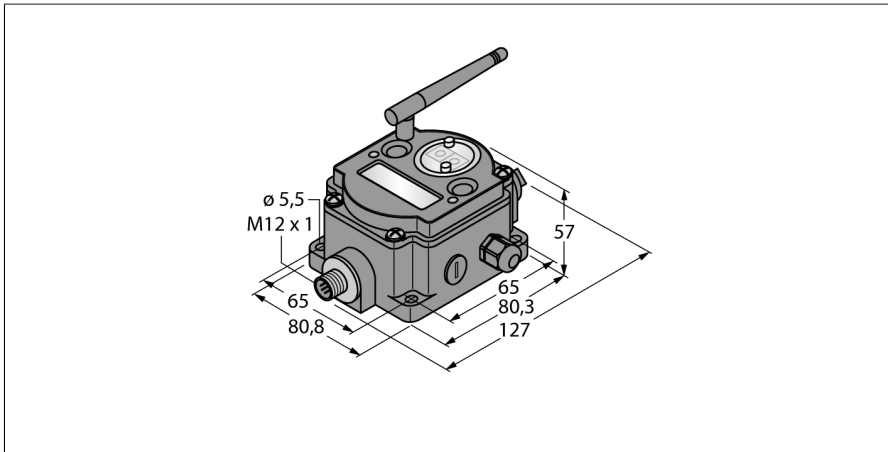


Radio Transmission System

Star Topology

Gateway PRO

DX80P2T6S



- External antenna (RG58 RP-SMA connection)
- Integrated signal strength indicator
- Configuration via DIP switch
- Modbus RTU communication, RS485 interface
- Modbus TCP or EtherNet/IP
- Integrated web browser
- Deterministic data transfer
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- Transmission power: 63 mW, 18 dBm conducted, ≤ 20 dBm EIRP
- Modbus TCP
- Ethernet IP
- Integrated web server
- Operating voltage: 10...30 VDC
- Frequency: 2.4 - 2.4835 GHz ISM band
- Transmission power: 18 dBm conducted, ≤ 20 dBm EIRP
- Spread spectrum: FHSS (Frequency Hopping Spread Spectrum)
- Power consumption: < 60 mA at 24 VDC

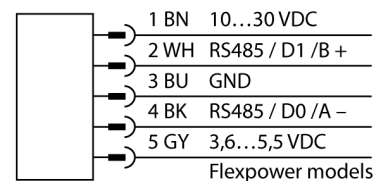
Type	DX80P2T6S
ID	3077832

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

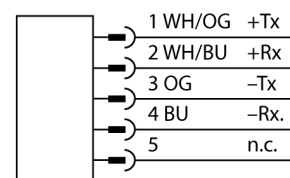
I/O data	
Number of channels	-
Input type	-
Number of channels	-
Output type	-
Communication protocol	RS485 Modbus RTU EtherNet/IP Modbus TCP

Electrical data	
Runs with battery	No
Operating voltage U_n	10...30 VDC
DC rated operating current I_n	≤ 60 mA
Power-on indication	LED, Green

Wiring Diagram



Ethernet



Functional principle

The DX80 system forms a radio-based network for wireless, bidirectional transfer of sensor signals in a star topology. It consists of a gateway that transfers the I/O signals to the control system and to as many as 47 nodes, with each node taking maximally 12 sensors/actuators. The system is configured via the gateway with the included software. You can feed different components with DC power either via mains supply or self-sufficiently via

Mechanical data

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

Tests/approvals

battery or solar cell. The gateway Pro enables communication via RS485 interface as well as via Modbus TCP gateway or Ethernet/IP.

FCC-ID UE300DX80-2400. This device complies with FCC para.15, subpara. C, 15.247

ETSI/EN: In compliance with EN 300 328: V1.8.1 (2014-04)

IC: 7044A-DX8024

Radiation protection 10V/m for 80-2700 MHz acc. to EN 61000-6-2

Shock and vibration resistant: 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	
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	