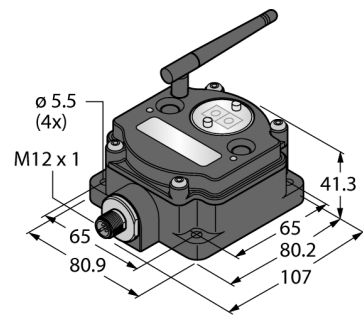


Radio Transmission System

Serial Data Transmission

Serial Radio

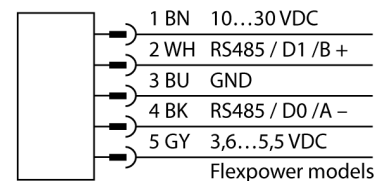
DX80SR2M-H



Type	DX80SR2M-H
ID	3044063
Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Star topology
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	-
Input type	-
Number of channels	-
Output type	-
Communication protocol	Modbus RTU RS232 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

- External antenna (RG58 RP-SMA connection)
- Integrated signal strength indicator
- Configuration via DIP switch
- Topology selectable via DIP switch
- Repeater for extension of network
- Deterministic data transfer
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- Transmission power: 63 mW, 18 dBm conducted, ≤ 20 dBm EIRP
- Power consumption: < 60 mA at 24 VDC

Wiring Diagram



Functional principle

The DX80 serial radios transfer data via RS232 or RS485 interface. The following choices are possible: Point-to-Point, star, or tree. Each network consists of a master and at least one slave. Repeaters extend the radio range. The device type is determined via internal DIP-switches. The baud rate is also adjustable, and can be up to 115.2 kBd. There is no software required to connect and adjust the devices.

FCC-ID UE300DX80-2400. This device complies with FCC para.15, subpara. C, 15.247
ETSI/EN: In compliance with EN 300 328: V1.7.1 (2006-05)
IC: 7044A-DX8024

Mechanical data	
Design	Rectangular, DX80SR
Housing material	Plastic, PC
Antenna connection	RP-SMA female connector
Ambient temperature	-40...+85 °C
Relative humidity	0...95%
Protection class	IP67
Tests/approvals	
Approvals	ATEX II 3 G

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-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	
BWA-205-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	