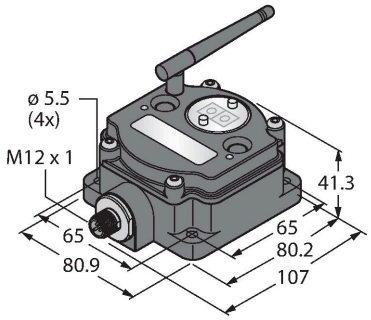
DX80SR2M-HL
Radio Transmission System – Serial Data Transmission Serial Radio



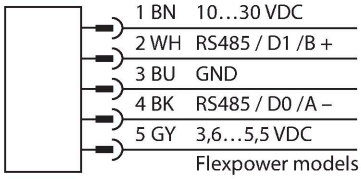
Technical data

Type	DX80SR2M-HL
ID	3805981
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
Range	3200000 mm
I/O data	
Number of channels	-
Input type	-
Number of channels	-
Output type	-
Communication protocol	Modbus RTU RS232

Features

- Internal antenna
- No display
- 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.
Norms:
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

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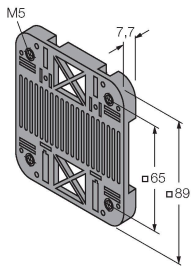
Technical data

	RS485
Electrical data	
runs with battery	nein
Operating voltage	10…30 VDC
DC rated operational current	≤ 60 mA
Power-on indication	LED, Green
Mechanical data	
Design	Rectangular, DX80SR
Dimensions	107 x 80.9 x 41.3 mm
Housing material	Plastic, PC
Antenna connection	Internal (wire loop)
Ambient temperature	-20…+80 °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

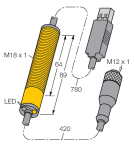
Accessories

SMBDX80DIN	3077161



Mounting panel for DIN rail, suited for CP80, DX80, K80, Q80, operating temperature: -20…90 °C

Accessories

Dimension drawing	Type	ID	
	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

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