

DX80N2X2S-PB1 Radio Transmission System – Star Topology Node (FlexPower)



Technical data

Туре	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 Spec- trum)
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
Range	3200000 mm
I/O data	
Number of channels	2/2
Input type	NPN/020 mA
Number of channels	2
Output type	NMOS
Electrical data	
runs with battery	ја

Features

- 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

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 selfsufficiently 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



Technical data

Operating voltage	3.65.5 VDC		
Power-on indication	LED, Green		
Mechanical data			
Design	Rectangular, DX80		
Dimensions	60.96 x 45.72 x 26.8 mm		
Housing material	Plastic, FR4 circuit board		
Antenna connection	RP-SMA female connector		
Ambient temperature	-40+85 °C		
Relative humidity	095 %		
Protection class	IP00		
Tests/approvals			
Approvals	ATEX II 3 G		

Accessories

Dimension drawing	Туре	ID	
Keine Maßzeichnung vorhanden! No drawing available!	BWC-LMRSFRPB	3079296	Surge protection, bulkhead fitting, RP- SMA type
	BWC-1MRSFRSB0.2	3078544	Antenna extension, RP-SMA on RP- SMAF bulkhead fitting, 0.2m, RG58, loss 1.05 dB/m
	BWC-1MRSFRSB1	3078337	Antenna extension, RP-SMA on RP- SMAF bulkhead fitting, 1 m, RG58, loss 1.05 dB/m
	BWC-1MRSFRSB2	3078338	Antenna extension, RP-SMA on RP- SMAF bulkhead fitting, 2m, RG58, loss 1.05 dB/m
	BWC-1MRSFRSB4	3077488	Antenna extension, RP-SMA on RP- SMAF bulkhead fitting, 4m, RG58, loss 1.05 dB/m
	BWC-1MRSMN05	3077486	Antenna extension, RP-SMA on N- male, 0.5 m, RG58, loss 0.56 dB/m
	BWC-1MRSMN2	3077820	Antenna extension, RP-SMA on N- male, 2m, RG58, loss 0.56 dB/m



Dimension drawing	Туре	ID	
	BWC-4MNFN3	3077489	Antenna extension, N male connector to N female connector, cable length: 3 m, LMR400, coaxial, loss: 0.22 dB/m
	BWC-4MNFN6	3077490	Antenna extension, N-male on N- female, 6m, LMR400, coaxial, loss 0.22 dB/m
	BWC-4MNFN15	3077821	Antenna extension, N-male on N- female, 15 m, LMR400, coaxial, loss 0.22 dB/m
	BWC-4MNFN30	3077822	Antenna extension, N-male on N- female, 30m, LMR400, coaxial, loss 0.22 dB/m

Accessories

Dimension drawing	Туре	ID	
2-	BWA-206-A	3081081	External antenna 6 dBi, N-female
-003 29 - 1	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
a 11	BWA-207-C	3077818	Internal antenna 7 dBi, RP-SMA male
	DX81-LITH	3086016	Battery Case incl. XL-205F Battery
	DX81-LITH-NB	3086018	Battery case; Recommended Battery XL-205F