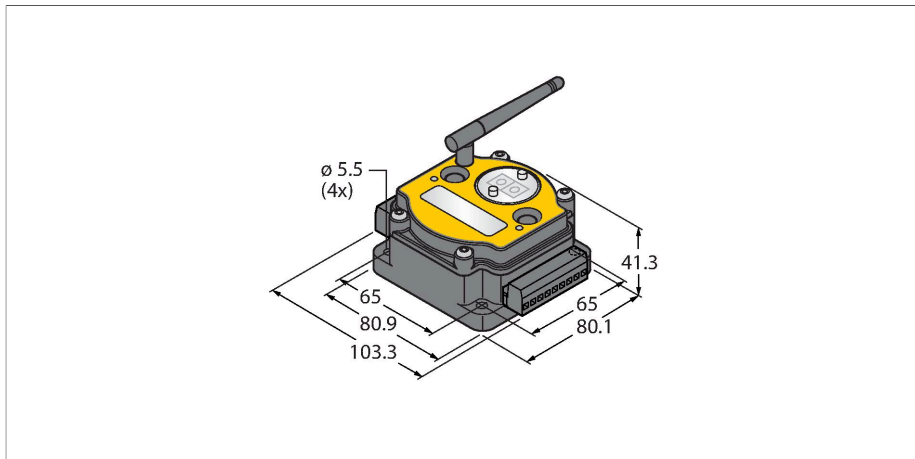


DX80N2X2S-P7C

Radio Transmission System – Star Topology

Node (FlexPower)



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, up to 12 x NPN
- Outputs, up to 12 x NMOS
- Max. 12 inputs and outputs

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:

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

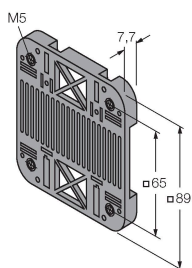
| | |
|-------------------------------|------------------------------------------|
| Type | DX80N2X2S-P7C |
| ID | 3018807 |
| Wireless data | |
| Type of radio | short-range |
| Installation | stationary |
| Topology | Star topology |
| Function | Star topology |
| Device type | Node |
| Frequency band | 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 |
| Range | 3200000 mm |
| I/O data | |
| Number of channels | max. 12 |
| Input type | NPN |
| Number of channels | max. 12 |
| Output type | NMOS |
| Communication protocol | RS485 |

Technical data

| Electrical data | |
|--------------------------------------------|-------------------------|
| runs with battery | ja |
| Operating voltage | 3.6...5.5 VDC |
| Power-on indication | LED, Green |
| Mechanical data | |
| Design | Rectangular, DX80 |
| Dimensions | 80.1 x 103.3 x 41.3 mm |
| Housing material | Plastic, PC |
| Antenna connection | RP-SMA female connector |
| Ambient temperature | -20...+80 °C |
| Relative humidity | 0...95 % |
| Protection class | IP20 |
| Tests/approvals | |
| Approvals | ATEX II 3 G |
| Approvals | CE CSA ATEX |
| Device marking | II 3 G Ex nA IIC T4 Gc |
| Ex approval acc. to conformity certificate | LCIE 10 ATEX 1012 X |



Accessories










| | |
|------------|---------|
| SMBDX80DIN | 3077161 |
|------------|---------|



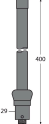
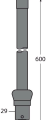
Mounting panel for DIN rail, suited for CP80, DX80, K80, Q80, operating temperature: -20...90 °C


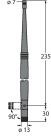
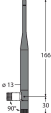
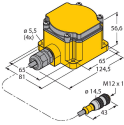
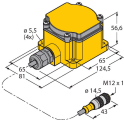
Accessories

| Dimension drawing | Type | ID | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|-------------------------------------------------|
|  Keine Maßzeichnung vorhanden! No drawing available! | BWC-LMRSFRPB | 3079296 | Surge protection, bulkhead fitting, RP-SMA type |
| |  | BWC-1MRSFRSB0.2 | 3078544 |

| Dimension drawing | Type | ID | |
|-------------------------------------------------------------------------------------|---------------|---------|----------------------------------------------------------------------------------------------------------------|
|  | 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 |
|  | 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 | Type | ID | |
|-------------------------------------------------------------------------------------|-----------|---------|------------------------------------|
|  | BWA-2O6-A | 3081081 | External antenna 6 dBi, N-female |
|  | BWA-2O8-A | 3081080 | External antenna 8.5 dBi, N-female |

| Dimension drawing | Type | ID | |
|-----------------------------------------------------------------------------------|--------------|---------|-----------------------------------------------|
|  | BWA-202-C | 3077816 | Internal antenna 2 dBi, RP-SMA male, standard |
|  | BWA-205-C | 3077817 | Internal antenna 5 dBi, RP-SMA male |
|  | 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 |