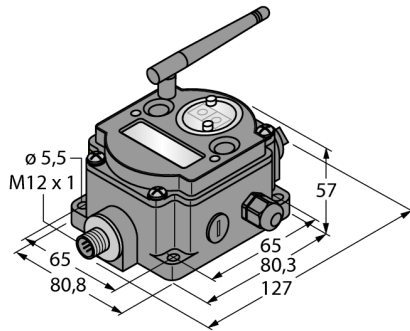


Radio Transmission System

Star Topology

Gateway PRO

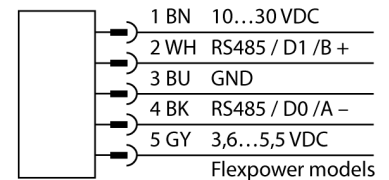
DX80P2T6S



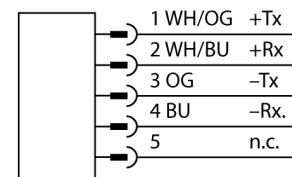
- External antenna (RG58 RP-SMA connection)
- Integrated signal strength indicator
- Configuration via DIP switch
- Modbus RTU communication, RS485 interface
- Modbus TCP or EtherNet/IP
- Integrated web browser
- Deterministic data transfer
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- 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 designation | DX80P2T6S |
| Ident no. | 3077832 |
| Type of radio | short-range |
| Relative level of spurious | -20 dB |
| Wireless data | |
| Type of radio | short-range |
| Installation | stationary |
| 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 |
| Installation | stationary |
| Frequency range | 2.402 - 2.483 GHz |
| Frequency band | 2,4 GHz ISM Band |
| 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 |
| Number of channels | - |
| Input type | - |
| Number of channels | - |
| Output type | - |
| Design | Rectangular |
| Housing material | Plastic, PC |
| Ambient temperature | -20...+80 °C |
| Protection class | IP67 |
| Dimensions | 127 x 80.8 x 57 mm |
| Operating voltage | 10...≤ 30 VDC |
| DC rated operational current | ≤ 60 mA |
| Power-on indication | LED, Green |
| Tests/approvals | |

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 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

**Radio Transmission System
Star Topology
Gateway PRO
DX80P2T6S**

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

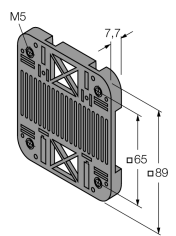
IC: 7044A-DX8024

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

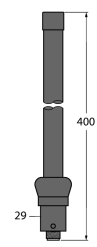
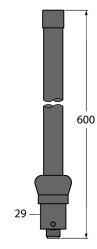
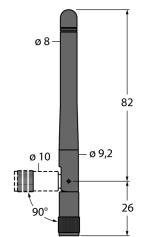
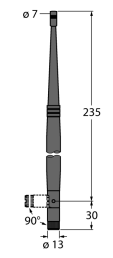
Shock and vibration resistant: IEC 68-2-6 and
IEC 68-2-7

**Radio Transmission System
Star Topology
Gateway PRO
DX80P2T6S**

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 |  |

**Radio Transmission System
Star Topology
Gateway PRO
DX80P2T6S**

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, M12 x 1, 5-pin, male, USB type A, length 1 m; supplies the connected device with 10 V. An external power supply via a Y-splitter is recommended for the connected device | |