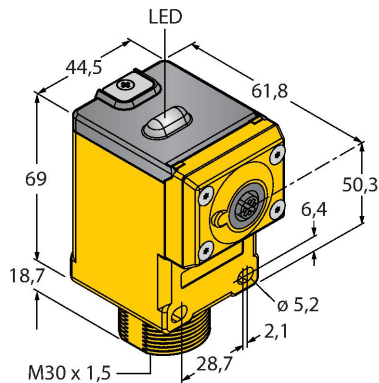


# DX80N2Q45RD2

## Radio Transmission System – Star Topology Node for Connecting External Sensors



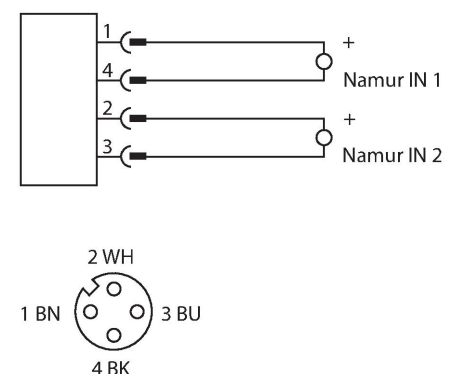
### Technical data

|                               |                                          |
|-------------------------------|------------------------------------------|
| Type                          | DX80N2Q45RD2                             |
| ID                            | 3080329                                  |
| Wireless data                 |                                          |
| Type of radio                 | short-range                              |
| Installation                  | stationary                               |
| Topology                      | Star topology                            |
| Device type                   | Node                                     |
| Frequency band                | 2.4-GHz ISM band                         |
| Frequency range               | 2.402...2.483 GHz                        |
| Number of radio channels      | 27                                       |
| Channel width                 | 2 MHz                                    |
| Spread spectrum technology    | FHSS (Frequency Hopping Spread Spectrum) |
| Single-Carrier Residence Time | 7.8 ms                                   |
| Response time typical         | < 250 ms                                 |
| Output power ERP              | 18 dB/65 mW                              |
| Output power EIRP             | 18 dB/65 mW                              |
| Range                         | 1000000 mm                               |
| I/O data                      |                                          |
| Number of channels            | 2                                        |
| Input type                    | NAMUR                                    |
| Electrical data               |                                          |
| runs with battery             | ja                                       |
| Operating voltage             | 3.6...5.5 VDC                            |
| DC rated operational current  | ≤ 0.1 mA                                 |
| Excess gain indication        | LED, red                                 |

### Features

- Protection class IP67
- Mechanical screw-in thread M30 × 1.5
- Connection via M12 × 1 female connector, 4-pin
- Base unit for external sensor
- For connecting up to two NAMUR sensors
- Female, M12 x 1
- Sensor supplied by base unit
- Sensor voltage adjustable via DIP switch
- Operating voltage: 3.6...5.5 VDC
- Current consumption: ≤ 100 µA
- Supply via 2x 3.6 V Li-ion AA batteries, supplied with the device
- FCC-ID UE300DX80-2400 This device complies with FCC para. 15, sub para. C, 15.247 ETSI/EN: In compliance with EN 300 328: V1.7.1 (2006-05) IC: 7044A-DX8024
- Radiation protection 10 V/m for 80-2700 MHz acc. to EN 61000-6-2

### Wiring diagram



Technical data

|                       |                                          |
|-----------------------|------------------------------------------|
| Power-on indication   | LED, Green                               |
| Mechanical data       |                                          |
| Design                | Rectangular, Q45                         |
| Dimensions            | 66.5 x 44.5 x 97.1 mm                    |
| Housing material      | Plastic, PBT<br>Lexan, Yellow            |
| Electrical connection | Connector, M12 × 1, 4-pin                |
| Antenna connection    | Internal (wire loop)                     |
| Ambient temperature   | -40...+70 °C                             |
| Storage temperature   | -40...+70 °C                             |
| Relative humidity     | 0...90 %                                 |
| Protection class      | IP67                                     |
| Tests/approvals       |                                          |
| MTTF                  | 67 years acc. to SN 29500 (Ed. 99) 40 °C |
| Approvals             | CE, cURus, CSA                           |

Functional principle

The Q45 wireless nodes can be integrated into a DX80 wireless network in star topology. Thanks to the integrated battery, these devices work fully autonomously and can be connected directly with any DX80 gateway or DXM controller. Some models include a sensor element or can be connected to external sensors or other transducers. Depending on the type of operation, the battery service life may last several years. Conforms to EN 300 328: V2.2.2 (2019-02)

Accessories

|                                                               |         |
|---------------------------------------------------------------|---------|
| BWA-BATT-006                                                  | 3017987 |
| Lithium-ion battery, 3.6 VDC,<br>2400 mAh, AA, GGV UN3090/CL9 |         |