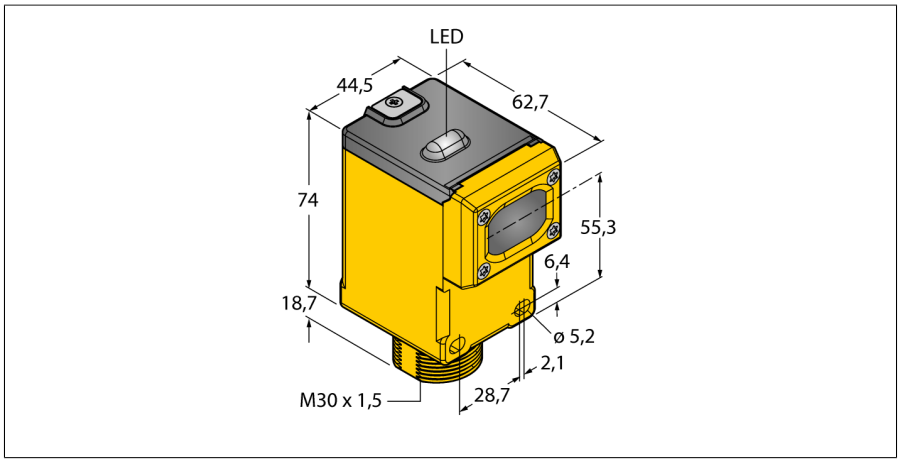
Radio Transmission System
Star Topology
Node with Integrated Sensor
DX80N2Q45D-NB



Type	DX80N2Q45D-NB
ID	3802773

Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Star topology
Function	Proximity switch
Device type	Wireless sensor
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	1…300 mm

I/O data	
Number of channels	1/1
Input type	Discrete (sensor)/counter input
Number of channels	1
Output type	Reset counter

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
Power-on indication	LED, Green

- Protection class IP67
- Mechanical screw-in thread M30 × 1.5
- Integrated diffuse-mode sensor, red light, focal distance 300 mm
- 2.4 GHZ frequency band
- Frequency hopping FHSS
- Time division multiplex access - TDMA
- Operating voltage: 3.6…5.5 VDC
- Current consumption: ≤ 100 µA
- Supply via 2 x 3.6 V Li-ion AA batteries, not 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

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)

Excess Gain Curve

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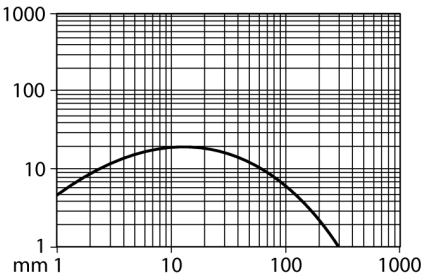
Mechanical data	
Design	Rectangular, Q45
Housing material	Plastic, PBT, Yellow
Antenna connection	Internal (wire loop)
Ambient temperature	-40…+70 °C
Storage temperature	-40…+70°C
Relative humidity	0…90%
Protection class	IP67

Tests/approvals	
MTTF	67 years acc. to SN 29500 (Ed. 99) 40 °C
Approvals	CE, cURus, CSA



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Accessories

Type code	Ident no.		Dimension drawing
BWA-BATT-006	3017987	Lithium-ion battery, 3.6 VDC, 2400 mAh, AA, GGV UN3090/ CL9	

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