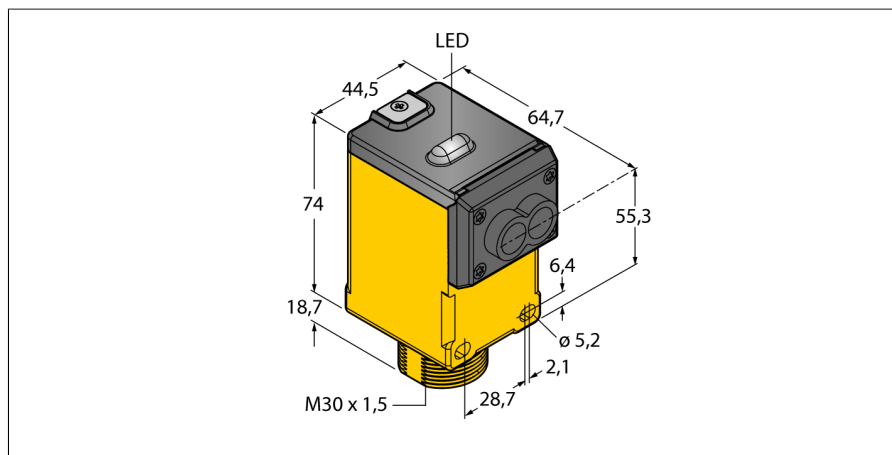


Radio Transmission System

Star Topology

Node with Integrated Sensor

DX80N2Q45F



Type	DX80N2Q45F
ID	3026114

Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Star topology
Function	Photoelectric sensor for glass fibers
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

I/O data	
Number of channels	1
Input type	Discrete (sensor)

Electrical data	
Runs with battery	Yes
Operating voltage U_s	3.6...5.5 VDC
DC rated operating current I_s	≤ 0.1 mA
Excess gain indication	LED, red
Power-on indication	LED, Green

- Protection class IP67
- Mechanical screw-in thread M30 × 1.5
- Integrated fiber optic sensor, red light, focal distance dependent on fiber optics
- 2.4 GHz frequency band
- Frequency hopping FHSS
- Time division multiplex access - TDMA
- Operating voltage: 3.6...5.5 VDC
- Current consumption: ≤ 100 μ A
- 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

Functional principle

Q45 sensors and DX80 gateway are networked in star topology. Thanks to the integrated battery, they are the first, fully self-sufficiently operating sensors worldwide. No further wiring is necessary. Different types are available. Depending on the type of operation, the battery may last several years. They can be easily integrated into an existing DX80 network.

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

Accessories

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