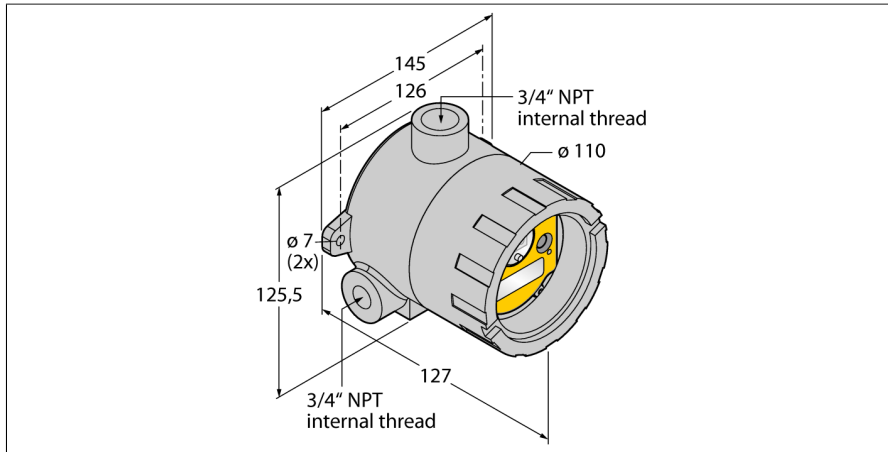


# Radio Transmission System

## Star Topology

### Node (FlexPower)

#### DX99N2X1S2N0M2X0D2



- External antenna (RG58 RP-SMA connection)
- Aluminium housing
- Integrated signal strength indicator
- Configuration via DIP switch
- Deterministic data transmission
- Frequency hopping FHSS
- Time Division Multiplex Access TDMA
- Transmission power: 63 mW, 18 dBm conducted, ≤ 20 dBm EIRP
- Internal battery
- Powers connected sensors with 18 V
- Inputs: 2 x NPN, 2 x 0...20 mA

Type	DX99N2X1S2N0M2X0D2
ID	3014189
<b>Wireless data</b>	
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
<b>I/O data</b>	
Number of channels	2 / 2
Input type	NPN/0...20 mA
Number of channels	-
Output type	-
<b>Electrical data</b>	
runs with battery	ja
Operating voltage	3.6...5.5 VDC
Power-on indication	LED, Green

#### Functional principle

The DX99 nodes are participants of a DX80 network and can be installed in the Ex area up to zones 0 and 20. The network may consist of any combination of DX99 and DX80 nodes. The node with the robust metal housing is powered via the built-in battery. Connected sensors are supplied with 10 V or 18 V at adjustable intervals. The devices are available in different IO configurations.

FCC-ID UE300DX80-2400. This device complies with FCC para.15, subpara. C, 15.247 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

Mechanical data	
Design	Rectangular, DX99
Housing material	Metal, AL
Antenna connection	RP-SMA female connector
Ambient temperature	-20...+80 °C
Relative humidity	0...95%
Protection class	IP68
Tests/approvals	
Approvals	ATEX II 1 GD
Approvals	CE
	CSA
	ATEX
Device marking	II 1 G Ex ia IIC T4 Ga II 1 D Ex ia IIIC T82°C Da IP68
Ex approval acc. to conformity certificate	LCIE 08 ATEX 6098 X

## Accessories

Type code	Ident no.		Dimension drawing
BWA-2O2-001	3025642	External antenna, 2 dBi gain, coaxial cable 450 mm with RP-SMA connector, mechanical screw-in thread, 1/2" NPT, can be screwed directly into DX99...D... housing, ATEX II 2G approval	
BWA-2O2-002	3025644	External antenna, 2 dBi gain, coaxial cable 450 mm with RP-SMA connector, mechanical screw-in thread, 3/4" NPT, can be screwed directly into DX99...D... housing, ATEX II 2G approval	
BWA-BATT-001	3078261	Lithium-ion battery, D cell, 3.6 VDC, 19,000 mAh, American supplier, GGV UN3090/CL9	<p>Keine Maßzeichnung vorhanden!</p> <p>No drawing available!</p>