FL BT EPA - Wireless module

2692788

https://www.phoenixcontact.com/us/products/2692788

Factoryline Wireless Bluetooth Ethernet port adapter; 2.4 GHz frequency band, 1 wireless interface, WLAN black channel list, LEM, country approvals, IP65, connections: M12 connection for 9 V DC ... 30 V DC, M12 for LAN, autocrossing, compatible with PROFINET and PROFIsafe

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

Product description

Our Bluetooth modules can be used to easily, reliably, and cost-effectively integrate mobile or difficult to access automation devices or I/O modules into your Ethernet automation network.
With "black channel listing" and "low emission mode", Industrial Bluetooth can also be operated parallel to WLAN networks without any interference.
Quick and straightforward startup with configuration via MODE button, web interface or directly from a controller is yet another feature of this solution.

Your advantages

- WLAN coexistence functions AFH, LEM, black channel listing
- Protocol-transparent communication on Layer 2
- Degree of protection IP65
- Integrated special antenna (EPA)
- Range* of up to 200 m

Commercial data

Item number	2692788
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DN26
Product key	DNN2B1
Catalog page	Page 455 (C-6-2017)
GTIN	4046356422413
Weight per piece (including packing)	244.1 g
Weight per piece (excluding packing)	120 g
Customs tariff number	85176200
Country of origin	SE

Technical data

Product properties

Product type	Wireless module
Product family	AS-i
Type	Stand-Alone

Wireless card

Number	1
Assembly note	Permanently installed

Electrical properties

Maximum power dissipation for nominal condition	1.104 W

Supply: Module electronics

Connection method	M12 connector (A-coded, male)
Supply voltage	24 V DC
Supply voltage range	9 V DC ... 30 V DC
Supply current	46 mA (at 24 V DC)
Current consumption	46 mA (at 24 V DC)

Input data

Digital:

Number of inputs	1

Interfaces

Ethernet

Interface	Ethernet
Number	1
Connection method	M12 connectors (D-coded, female)

Antenna

Number	1
Connection method	permanently installed

Functions

Operating modes	Ethernet client adapter
Configuration	Web interface, MODE button, AT commands (TCP/IP), SSC
Automatic channel selection	FHSS, AFH
Quality of service (QoS)	Yes
Security	128-bit data encryption
	Authentication
	PIN
	Non-discoverable

Wireless licenses	Europe, additional countries in the e-shop
Country support	Belgium
	Bulgaria
	Denmark
	Germany
	Estonia
	Finland
	France
	Greece
	Great Britain
	Ireland
	Iceland
	Italy
	Japan
	Canada
	Latvia
	Liechtenstein
	Lithuania
	Luxembourg
	Malta
	Netherlands
	Norway
	Austria
	Poland
	Portugal
	Romania
	Sweden
	Switzerland
	Slovakia
	Slovenia
	Spain
	Czech Republic
	Hungary
	USA
	Cyprus (rep.)

Wireless

Designation	Bluetooth
Antenna connection method	(Internal)
Frequency range	2.402 GHz ... 2.48 GHz (ISM bandwidth)
Frequency band	2.4 GHz
Wireless standard	Bluetooth 2.1 + EDR
Transmission power	max. 15 dBm (EIRP)
Number of wireless interfaces	1

Wireless modules that can be connected	1
Profiles supported	PAN

Dimensions
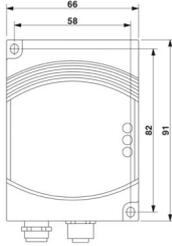
Dimensional drawing	
Width	66 mm
Height	91 mm
Depth	34 mm
Note on dimensions	Without M12 connections

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-40 °C ... 65 °C
Air pressure (operation)	795 hPa ... 1080 hPa (up to 2000 m above sea level)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 90 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 90 % (non-condensing)

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Mounting

Mounting type	Panel mounting
	Panel mounting
Assembly note	Internal circularly polarized panel antenna

Drawings

Schematic diagram
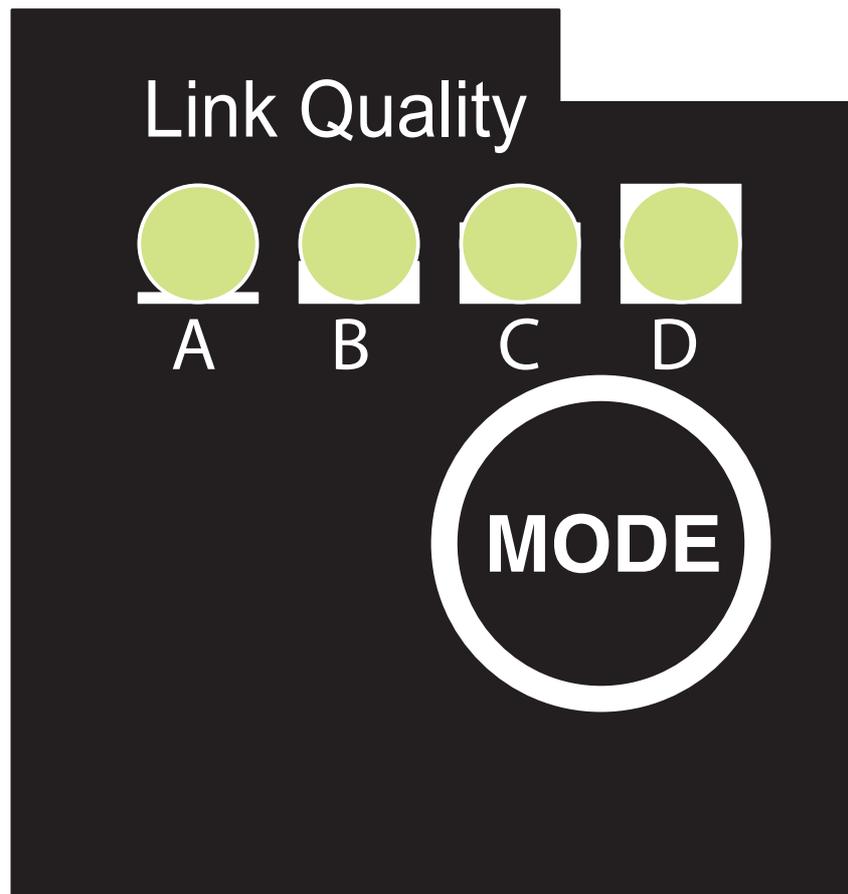
MODE button

The mode button helps in configuration.

Pay attention to the function in the data sheet and the manual.

The LEDs 'A' to 'D' help in status display.

Link Quality display (during operation)

A = sufficient, B = good

C = optimum, D = excellent

Schematic diagram
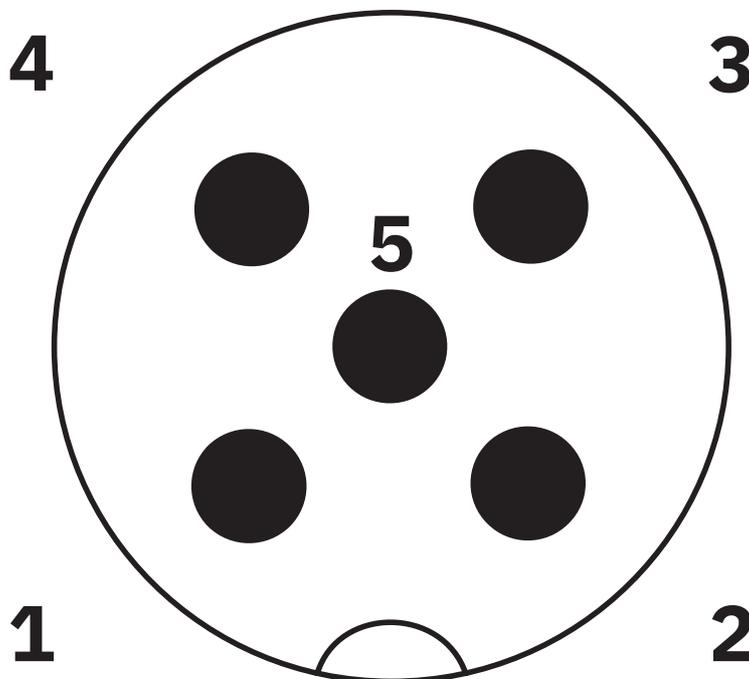
Connection of the trigger input DI and the supply voltage

PIN 1 Vin + (9-30 V DC)

PIN 2 External Trigger Ground

Pin 3 Vin GND (0 V)

Pin 4 External Triggerr + (9-30 V DC)

Pin 5 n.c.

FL BT EPA - Wireless module

2692788

https://www.phoenixcontact.com/us/products/2692788

Functional drawing

Circular polarized antenna

FL BT EPA - Wireless module

Schematic diagram

3   **4**

2   **1**
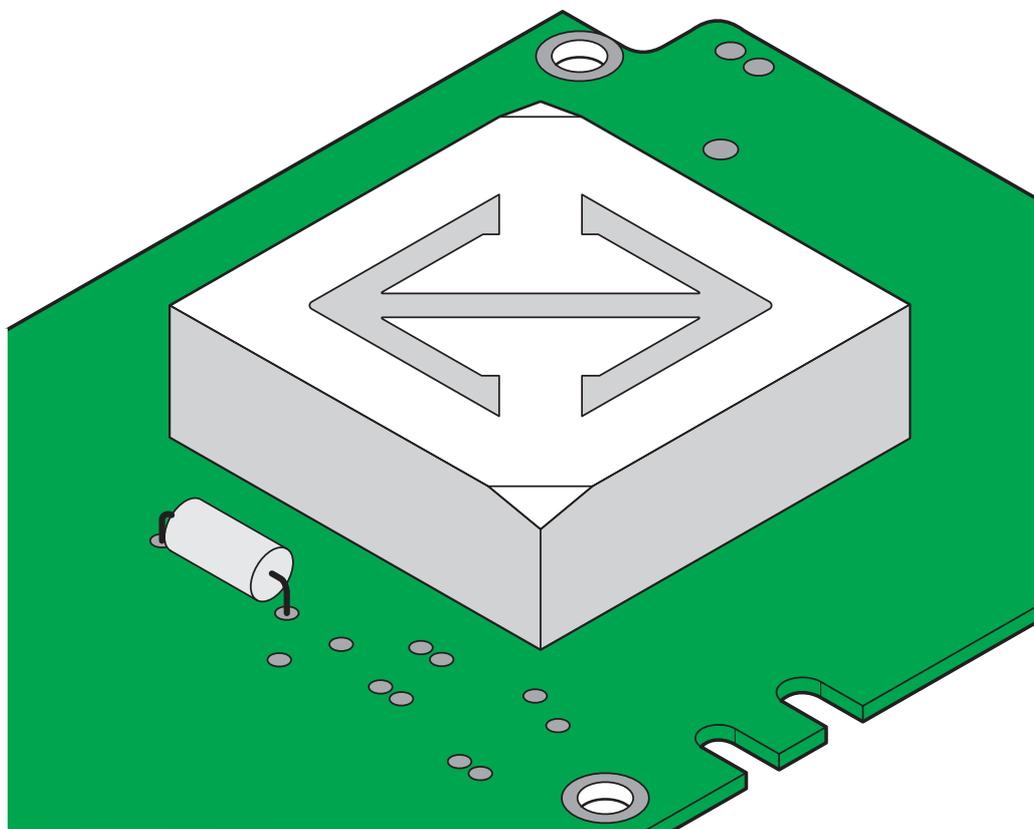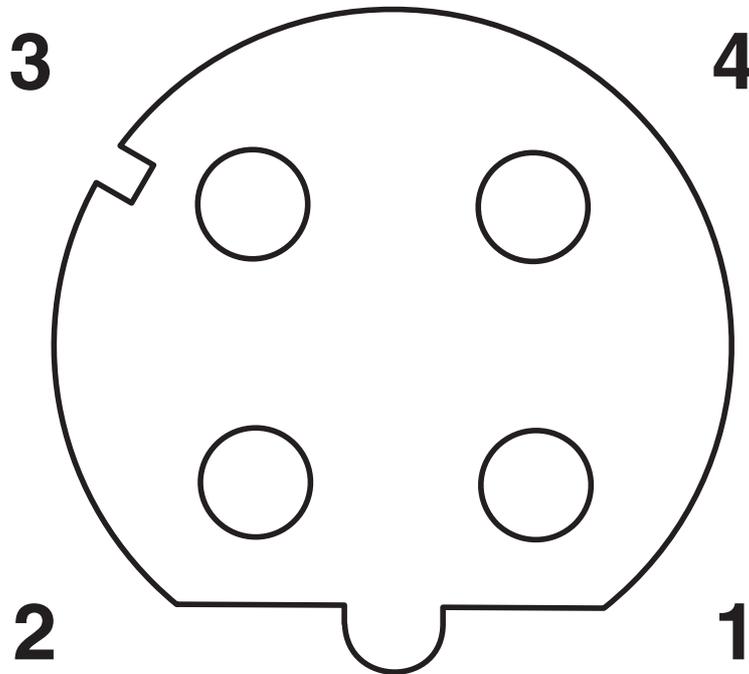
Assignment of the LAN socket
Pin 1 Transmit +
Pin 2 Receive +
Pin 3 Transmit -
Pin 4 Receive -

Diagram
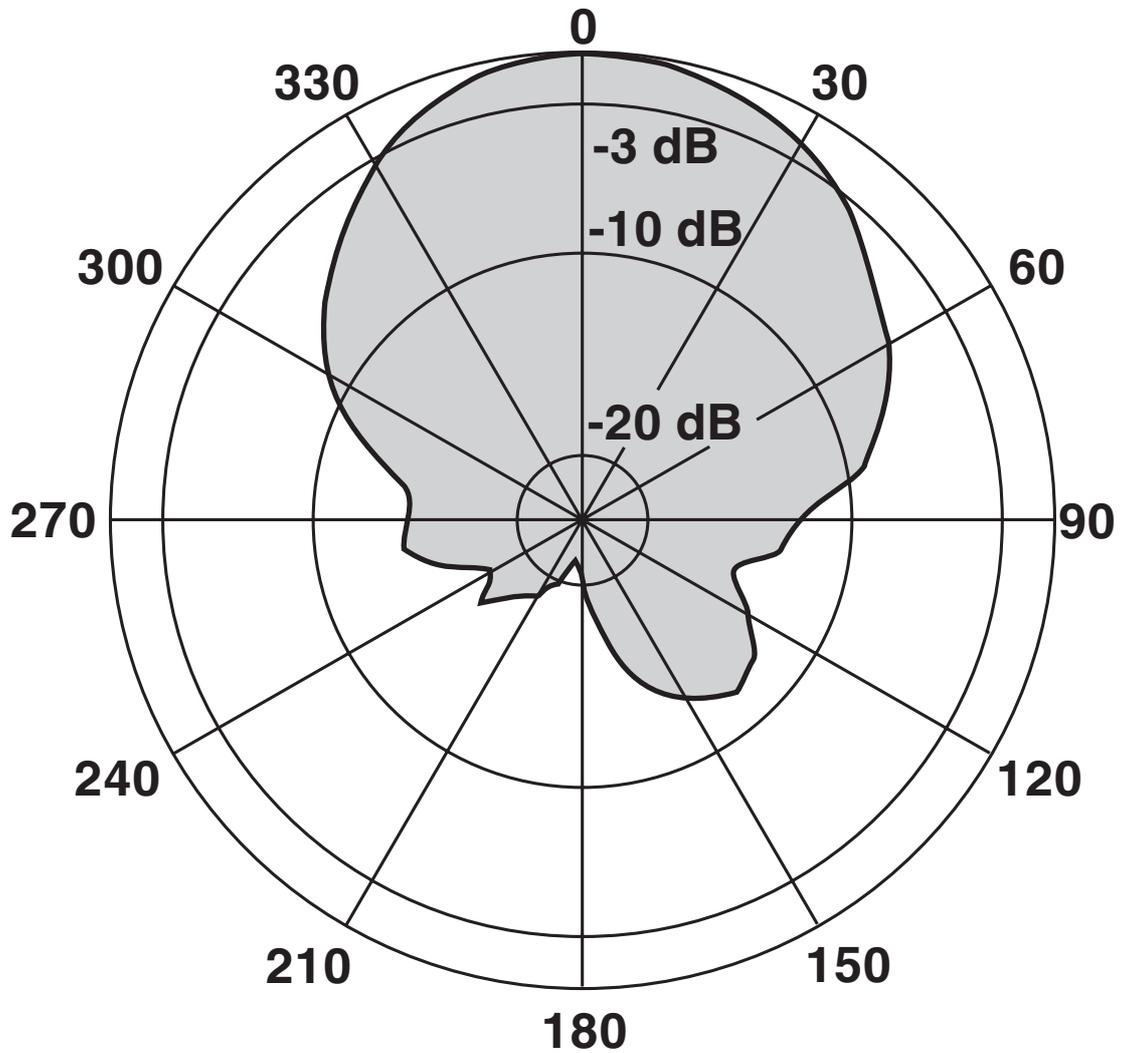
Antenna adjustment diagram
HP - Horizontal polarization
VP - Vertical polarization

FL BT EPA - Wireless module

Dimensional drawing

FL BT EPA - Wireless module

2692788
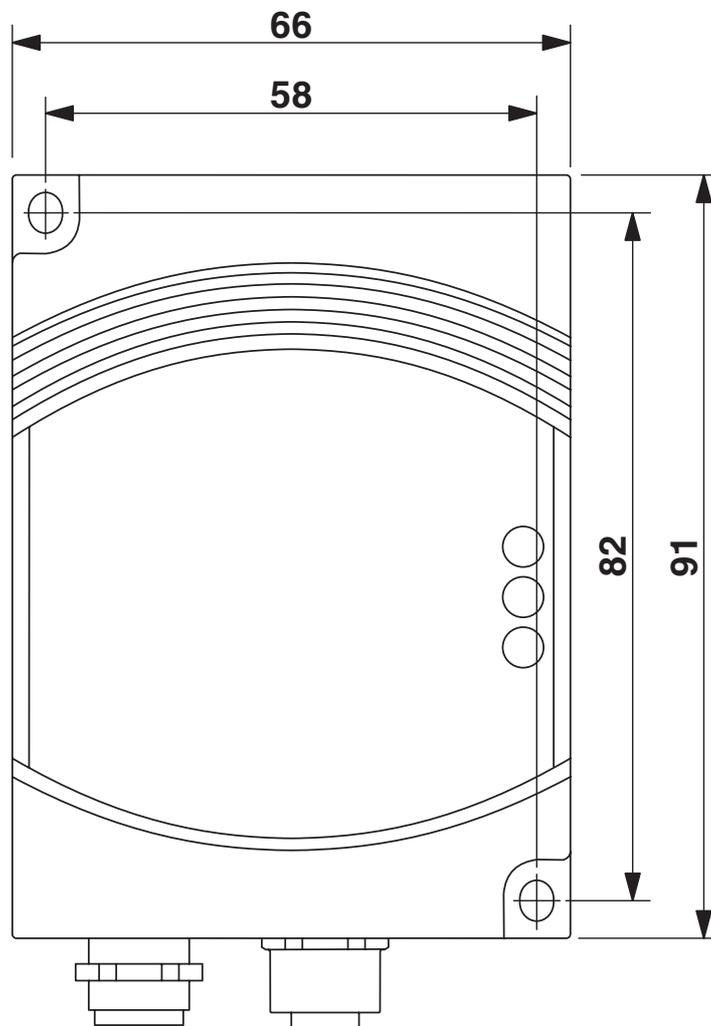
https://www.phoenixcontact.com/us/products/2692788

Product drawing
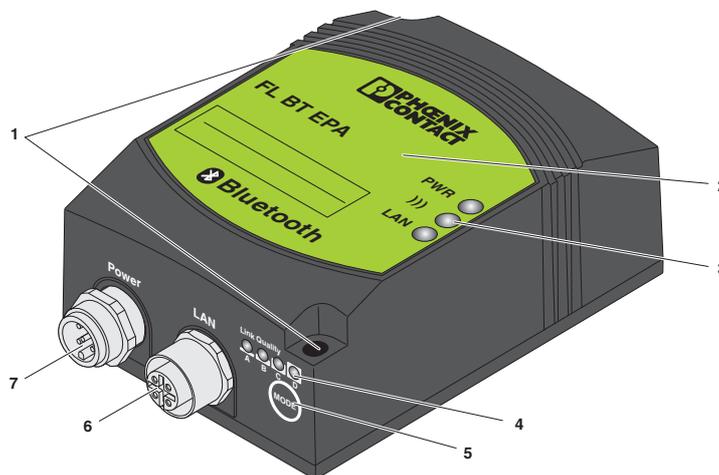
1 Fixing holes
2 Internal circular polarized antenna
3 Status and diagnostic indicators
4 Link quality and configuration / status indicator
5 Mode configuration button
6 LAN interface
7 Supply voltage connection

Application drawing
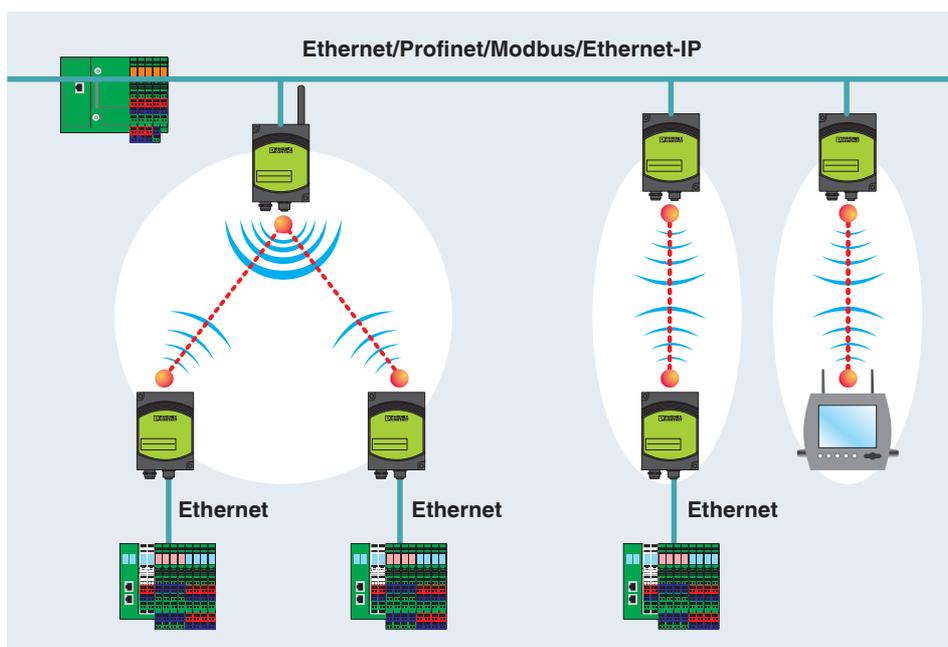
FL BT EPA devices help you to transmit industrial Ethernet protocols from one automation device to another via Bluetooth: for Modbus TCP, Ethernet/IP, TCP/IP or demanding PROFINET or PROFIsafe applications.

The FL BT EPA AIR SET is a "ready to use" package. Unpack, connect, press the mode button and the wireless path is ready to work in just a few seconds! The FL BT EPA AIR SET can be used to set up an extremely solid and reliable wireless transmission path.

Schematic diagram

Status and diagnostic indicators PWR (green)

- Supply voltage is active))) (blue/blue flashing, pink, red) Status of the Bluetooth connection (blue)
- Data transmission (blue flashing)
- Connection establishment (pink)
- Error (red)

LAN (yellow)

- Link display (yellow)
- Data transmission (yellow flashing)

FL BT EPA - Wireless module

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%