

## FL BT EPA

Order No.: 2692788



### Commercial data

EAN	4046356422413
Pack	1
Weight/Piece	256.60 g
Catalog page information	Page 215 (AX-2009)

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### Product description

#### Wireless Ethernet for the transmission of control data

FL BT EPA AIR SET can thus be used to set up an extremely rugged and reliable wireless transmission path for PROFINET, Modbus/TCP, Ethernet/IP or other Ethernet protocols quickly and easily.

#### The rugged wireless connection for the industrial automation

The Bluetooth Ethernet Port Adapter FL BT EPA is the solution for the wireless communication connection between the automation device and the control system network – irrespective of whether it is PROFINET, PROFIsafe, Ethernet/IP, Modbus-TCP or TCP/IP

#### Factory Line Bluetooth

Industrial Bluetooth provides an extremely rugged, reliable and safe wireless communication. AFH\*, LEM\* and BCL\* ensure hassle-free parallel operation with WLAN networks.

AFH: Adaptive frequency hopping; LEM: Low-emission mode; BCL: Black Channel List

#### Integrated special antenna:

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The integrated and circularly polarized antenna ensures reliable and stable reception conditions in greatly metallic environments. Install the Ethernet port adapter as an intelligent antenna directly in the field.

#### **Configuration via the mode button:**

Simply select an operating mode using the mode button and a stable and secure wireless connection between the two Ethernet port adapters is established automatically in a few seconds – there's nothing faster or easier.

#### **Industrial Bluetooth module:**

Developed for use in extremely rough industrial conditions. Its features are: High-performance wireless properties, high range, large temperature range of -30°C to +60°C and high vibration, shock and EMC resistance.

#### **Complete control by the controller:**

Control all functions of the Ethernet port adapter with your application program. Whether it is configuration, scanning for networks or quick switching of access points, all commands are executed in no time. The Ethernet port adapter provides optimum flexibility.

#### **PROFINET-optimized:**

The Ethernet port adapter enables stable PROFINET and PROFIsafe update times from 8 ms onwards. Fulfills the PROFINET compliance class A and PROFIsafe profile 2.4 requirements for functionally secure data transmission.

### **Technical data**

#### **Ethernet interface**

Interface	Ethernet
No.	1
Type of connection	M 12 connectors (D-coded, female)

#### **Wireless interface**

Name	Bluetooth
Frequency range	ISM 2.4 GHz
Transmission capacity	max. 20 dBm (with automatic control)
Number of wireless interfaces	1
Wireless modules that can be connected	1
Profiles supported	PAN

#### **Wireless card**

No.	1
Assembly instructions	Permanently installed

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**Antenna**

Assembly instructions	Internal circularly polarized panel antenna
No.	1
Type of connection	Permanently installed

**Power supply for module electronics**

Type of connection	M12 connector (A-coded, male)
Supply voltage	24 V DC
Range of supply voltages	9 V DC ... 30 V DC

**Functions**

Operating modes	Ethernet client adapter
Configuration	Web-based management
Automatic channel selection	FHSS, AFH
Security	128 bit data encoding
	Authentication
	PIN
	Non-discoverable

**Digital inputs**

Number of inputs	1
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**General data**

Width	66 mm
Height	91 mm
Depth	34 mm
Note on dimensions	Without M12 connections
Weight	120 g
Ambient temperature (operation)	-30 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 90 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 90 % (non-condensing)
Air pressure (operation)	795 hPa ... 1080 hPa (up to 2000 m above mean sea level)
Degree of protection	IP65
Class of protection	III
Conformance with EMC directives	Noise immunity test in accordance with EN 61000-6-2 EN 61000-6-4
Mounting type	Wall mounting

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Wireless licences	Belgium
	Bulgaria
	Denmark
	Germany
	Estonia
	Finland
	France
	Greece
	Great Britain
	Ireland
	Iceland
	Italy
	Canada
	Latvia
	Liechtenstein
	Lithuania
	Luxembourg
	Malta
	The Netherlands
	Norway
	Austria
	Poland
	Portugal
	Romania
	Sweden
	Switzerland
	Slovakia
	Slovenia
	Spain
	Czech Republic
	Hungary
	USA
	Cyprus (rep.)

<b>Accessories</b>		
Item	Designation	Description
<b>Cable/conductor</b>		
1400420	SAC-4P- 1,0-PUR/M12FS	Sensor/actuator cable, 4-pos., PUR halogen-free black, free conductor end on straight M12 socket, cable length: 1.0 m
1533576	SAC-4P- 2,0-PUR/M12FS	Sensor/actuator cable, straight female connector M12, 4-pos., cable length: 2 m
1668111	SAC-4P- 3,0-PUR/M12FS	Sensor/actuator cable, 4-pos., PUR halogen-free black, free conductor end on straight M12 socket, cable length: 3 m
1668124	SAC-4P- 5,0-PUR/M12FS	Sensor/actuator cable, 4-pos., PUR halogen-free black, free conductor end on straight M12 socket, cable length: 5 m
1569391	SAC-4P-M12MSD/ 2,0-931	Bus system cable, ETHERNET, 4-pos., PUR blue halogen-free, shielded, straight connector M12 D-coded on free conductor end, length: 2 m
1569401	SAC-4P-M12MSD/ 5,0-931	Bus system cable, ETHERNET, 4-pos., PUR blue halogen-free, shielded, straight connector M12 D-coded on free conductor end, length: 5 m
1657575	VS-M12MSD-RJ45-931/ 1,0	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 1 m
1657588	VS-M12MSD-RJ45-931/ 2,0	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 2 m
1657591	VS-M12MSD-RJ45-931/ 5,0	Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26 stranded (7-wire), RAL 5021 (water blue), M12 4-pos. D-coded on RJ45 connector, length: 5 m
<b>Plug/Adapter</b>		
1656725	VS-08-RJ45-5-Q/IP20	RJ45 connector, IP20, CAT5e, 8-pos., with QUICKON fast connection technology, for 1-wire and 7-wire conductors AWG 26 ... 22, for cable diameter of 4.5 mm ... 8.0 mm, TIA 568 B labeling, color: gray
<b>Software</b>		
2692254	FL WST BASIC	Simulation software for supporting the planning of wireless systems in industrial environments. Thus, the later number and position of wireless components can be estimated and the quality of the radio coverage simulated.
2692377	FL WST BASIC DEMO CD	Simulation software for supporting the planning of wireless systems in industrial environments. Their functionality is limited with regard to the memory options as compared with the full version FL WST BASIC.