

Wireless module - FL BT EPA MP - 2701416

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Bluetooth Ethernet port adapter with external antenna connection for the wireless connection of Ethernet devices, BT access point and client mode, omnidirectional antenna supplied as standard

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.

Why buy this product

- External RSMA antenna connection
- Range* of up to 200 m
- Protocol-transparent communication on Layer 2
- IP65 protection class
- WLAN coexistence functions AFH, LEM, black channel listing



Key commercial data

Packing unit	1 pc
GTIN	 4 046356 749725
Weight per Piece (excluding packing)	260.4 g
Weight per piece (including packing)	260.4 g
Custom tariff number	85176200
Country of origin	Sweden
Sales Key	O1 - Automatisation Systems

Technical data

Dimensions

Width	66 mm
Height	91 mm
Depth	34 mm
Note on dimensions	Without connections

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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °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

Ethernet interface

Interface	Ethernet
Number	1
Connection method	M 12 connectors (D-coded, female)

Wireless interface

Designation	Bluetooth
Wireless standard	Bluetooth 2.1 + EDR
Antenna connection method	RSMA (female)
Frequency range	2.402 GHz ... 2.48 GHz (ISM bandwidth)
Frequency band	2.4 GHz
Transmission power	max. 12 dBm (EIRP)
Number of wireless interfaces	1
Wireless modules that can be connected	7
Profiles supported	PAN

Wireless card

Number	1
Assembly instructions	Permanently installed

Antenna

Assembly instructions	External OMNI omnidirectional antenna supplied as standard, antennas can be exchanged
Number	1
Connection method	RSMA (male)
Gain	3 dBi ((2.4 GHz))

Power supply for 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)
	46 mA ((at 24 V DC, typical))

Functions

Operating modes	BT access point
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Technical data

Functions

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

Digital inputs

Number of inputs	1
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General

Weight	120 g
Mounting type	Wall mounting
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Conformance with EMC directives	Noise immunity test in accordance with EN 61000-6-2 EN 61000-6-4
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

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Technical data

General

	Slovakia
	Slovenia
	Spain
	Czech Republic
	Hungary
	USA
	Cyprus (rep.)

Classifications

eCl@ss

eCl@ss 4.0	27240409
eCl@ss 4.1	27240409
eCl@ss 5.0	27242215
eCl@ss 5.1	27250501
eCl@ss 6.0	27242208
eCl@ss 7.0	27242208
eCl@ss 8.0	27242208

ETIM

ETIM 3.0	EC001423
ETIM 4.0	EC000515
ETIM 5.0	EC000515

UNSPSC

UNSPSC 6.01	20142601
UNSPSC 7.0901	20142601
UNSPSC 11	20142601
UNSPSC 12.01	20142601
UNSPSC 13.2	20142601

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

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Approvals

Approvals submitted

Approval details

UL Listed

cUL Listed

cULus Listed

Accessories

Accessories

Antenna

Antenna - RAD-ISM-2400-ANT-OMNI-2-1-RSMA - 2701362



Omnidirectional antenna, 2.4 GHz, 2 dBi, linear vertical, 1.5 m cable, RSMA (male), IP65, 50 Ω impedance

Antenna - RAD-ISM-2400-ANT-VAN-3-0-RSMA - 2701358



Omnidirectional antenna with protection against vandalism, 2.4 GHz, 3 dBi gain, IP55 degree of protection, 1.5 m cable length, RSMA connection (male), h/v 360°/85° apex angle. Appropriate mounting material is available for wall mounting.

Antenna - RAD-ISM-2400-ANT-OMNI-6-0 - 2885919



Omnidirectional antenna, 2.4 GHz, 6 dBi, linear vertical, N (female), IP55, 50 Ohm impedance

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Accessories

Antenna - ANT-DIR-2459-01 - 2701186



Panel antenna, 2.4/5 GHz, 9 dBi, linear vertical, N (female), IP67, incl. mounting bracket and mast clips for 25 - 85 mm diameter, stainless steel

Assembly adapter

Assembly adapters - FL EPA WMS - 2701134



Set for mounting devices with EPA design to wall or mast, including mast clips for a diameter of 25 - 85 mm, can be moved on two axes for optimum alignment, stainless steel

Coaxial cable

Antenna cable - RAD-PIG-RSMA/N-0.5 - 2903263



Antenna cable, 0.5 m in length; N (male) -> RSMA (male), impedance 50 ohms

Antenna cable - RAD-PIG-RSMA/N-1 - 2903264



Antenna cable, 1 m in length; N (male) -> RSMA (male), impedance 50 ohms

Antenna cable - RAD-PIG-RSMA/N-2 - 2903265



Antenna cable, 2 m in length; N (male) -> RSMA (male), impedance 50 ohms

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Accessories

Antenna cable - RAD-PIG-RSMA/N-3 - 2903266



Antenna cable, 3 m in length; N (male) -> RSMA (male), impedance 50 ohms

Data cable preassembled

Network cable - VS-MSD-IP20-93E/1,0 - 1403498



Assembled Ethernet cable, CAT5e, shielded, 2-pair, AWG 26, stranded (7-wire), RAL 5021 (aqua blue), M12 plug to RJ45 plug/IP20, line, length 1 m

Data plug

RJ45 connector - VS-08-RJ45-5-Q/IP20 - 1656725



RJ45 connector, IP20, CAT5e, 8-pos., with QUICKON fast connection technology, for 26 ... 23 AWG 1-wire and 7-wire conductors, for 4.5 mm ... 8.0 mm cable diameter, labeling: TIA 568 B, color: gray

Mounting rail adapter

DIN rail adapter - FL EPA RMS - 2701133

Set for mounting devices with EPA design on a DIN rail



Sensor/actuator cable

Sensor/Actuator cable - SAC-4P- 1,0-PUR/M12FS - 1400420



Sensor/Actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, Cable length: 1 m

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Accessories

Sensor/Actuator cable - SAC-4P- 2,0-PUR/M12FS - 1533576



Sensor/Actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, Cable length: 2 m

Sensor/Actuator cable - SAC-4P- 3,0-PUR/M12FS - 1668111



Sensor/Actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, Cable length: 3 m

Sensor/Actuator cable - SAC-4P- 5,0-PUR/M12FS - 1668124



Sensor/Actuator cable, 4-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M12, A-coded, Cable length: 5 m
