

FL EPA 2 RSMA - Wireless module



1005957

<https://www.phoenixcontact.com/gb/products/1005957>

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Combined Ethernet wireless module with Bluetooth and Wi-Fi, exchangeable omni antenna included, Wi-Fi: AP and client, 2.4 and 5 GHz, Bluetooth: 2.1+EDR/4.0, PAN up to 7 connections, IP65, 9 ... 30 V DC, M12 connection, WEB, AT commands and mode button

Your advantages

- Combined wireless module for WLAN and Bluetooth
- Protocol-transparent communication on Layer 2
- Degree of protection IP65
- With replaceable RSMA antenna (included)

Commercial data

Item number	1005957
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DNN2B1
Product key	DNN2B1
Catalog page	Page 374 (C-6-2019)
GTIN	4055626477022
Weight per piece (including packing)	167.2 g
Weight per piece (excluding packing)	167.2 g
Customs tariff number	85176200
Country of origin	SE

Technical data

Product properties

Type	Stand-Alone
Product type	Wireless module
Application	Ethernet

Wireless card

Number	1
Assembly instructions	Permanently installed

Electrical properties

Maximum power dissipation for nominal condition	1.7 W
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Supply: Module electronics

Connection technology	M12 connector
Connection method	M12 connector (A-coded, male)
Supply voltage	24 V DC
Supply voltage range	9 V DC ... 30 V DC
Supply current	typ. 54 mA (at 24 V DC)
Current consumption	max. 190 mA (at 9 V DC)

Input data

Digital

Number of inputs	1
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Connection data

Power supply input

Connection method	M12 connector (A-coded, male)
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Interfaces

Ethernet

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

Antenna

Number	1
Connection method	RSMA (male)
Gain	3 dBi ((2.4 GHz / 5 GHz))
Length	107 mm

Functions

Operating modes	Access point/client adapter for WLAN and Bluetooth
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Configuration	Web interface, MODE button, AT commands (TCP/IP), SSC
Security	802.11i
	WPA PSK (preshared key)
	WPA2
	AES
	TKIP
	PIN
	Non-discoverable
Wireless licenses	Europe, USA, Canada, additional countries in the e-shop
	RED (Radio Equipment Directive)
	FCC 47 CFR part 15, subpart B
Country support	Belgium
	Bulgaria
	Denmark
	Germany
	Estonia
	Finland
	France
	Greece
	Great Britain
	Ireland
	Iceland
	Italy
	Japan
	Canada
	Croatia
	Latvia
	Liechtenstein
	Lithuania
	Luxembourg
	Malta
	Netherlands
	Norway
	Austria
Poland	
Portugal	
Romania	
Sweden	
Switzerland	
Slovakia	
Slovenia	
Spain	
South Korea	
Thailand	

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	Czech Republic
	Hungary
	USA
	Cyprus (rep.)

10/100 Mbps Ethernet

Number of interfaces	1
Connection method	M12 connectors (D-coded, female)
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps
Transmission physics	Copper
Transmission length	100 m (per segment)

Wireless

Designation	Bluetooth / WLAN
Antenna connection method	RSMA (female)
Frequency range	2.402 GHz ... 2.48 GHz (Bluetooth) 2.4095 GHz ... 2.4645 GHz (WLAN) 5.17 GHz ... 5.25 GHz (WLAN-AP) 5.17 GHz ... 5.71 GHz (WLAN-Client)
Frequency band	2.4 GHz 5 GHz
Wireless standard	Bluetooth 2.1 + EDR WLAN IEEE 802.11 b g a n
Transmission power	max. 16 dBm (Bluetooth: 10 dBm)
Number of wireless interfaces	1 IEEE 802.11 a/b/g/n, Bluetooth 2.1+EDR, Bluetooth LE 4.0
Wireless modules that can be connected	7 (BT 2.1+EDR, NAP-Mode)
Profiles supported	PAN (NAP, PANU) GATT (central)

Dimensions

Width	67.8 mm
Height	92.7 mm
Depth	33.2 mm
Note on dimensions	excluding M12 connections and antenna connection

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-40 °C ... 65 °C

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Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 93 % (non-condensing)
Permissible humidity (storage/transport)	non-condensing

EMC data

Electrostatic discharge

Standards/regulations	EN 61000-4-2
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Electromagnetic HF field

Standards/regulations	EN 61000-4-3
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Fast transients (burst)

Standards/regulations	EN 61000-4-4
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Surge current load (surge)

Standards/regulations	EN 61000-4-5
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Conducted interference

Standards/regulations	EN 61000-4-6
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Emitted interference

Standards/regulations	EN 55022
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Mounting

Mounting type	Wall mounting
Assembly instructions	External OMNI omnidirectional antenna supplied as standard, antennas can be exchanged

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1005957>



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705



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Approval ID: FILE E 238705



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Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 196811



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Classifications

ECLASS

ECLASS-11.0	19170101
ECLASS-12.0	19170101
ECLASS-13.0	19170101

ETIM

ETIM 8.0	EC000515
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UNSPSC

UNSPSC 21.0	43201400
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

FL EPA RMS - DIN rail adapter

2701133

<https://www.phoenixcontact.com/gb/products/2701133>

Set for mounting devices with EPA design on a DIN rail



FL EPA WMS - Mounting adapter

2701134

<https://www.phoenixcontact.com/gb/products/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



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NBC-M12MSD/ 5,0-93E/R4AC - Network cable

1407362

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Network cable, Ethernet CAT5 (100 Mbps), 4-position, shielded (Advanced Shielding Technology), Plug straight M12, coding: D / IP67, on Plug straight RJ45 / IP20, cable length: 5 m

NBC-M12MSD/ 1,0-93E/R4AC - Network cable

1407360

<https://www.phoenixcontact.com/gb/products/1407360>



Network cable, Ethernet CAT5 (100 Mbps), 4-position, shielded (Advanced Shielding Technology), Plug straight M12, coding: D / IP67, on Plug straight RJ45 / IP20, cable length: 1 m

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

1533576

<https://www.phoenixcontact.com/gb/products/1533576>



Sensor/actuator cable, 4-position halogen-free, free cable end, on Socket straight M12, coding: A, cable length: 2 m

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

1668111

<https://www.phoenixcontact.com/gb/products/1668111>



Sensor/actuator cable, 4-position halogen-free, free cable end, on Socket straight M12, coding: A, cable length: 3 m

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

1668124

<https://www.phoenixcontact.com/gb/products/1668124>



Sensor/actuator cable, 4-position halogen-free, free cable end, on Socket straight M12, coding: A, cable length: 5 m

SAC-4P-10,0-PUR/M12FS - Sensor/actuator cable

1683002

<https://www.phoenixcontact.com/gb/products/1683002>



Sensor/actuator cable, 4-position halogen-free, free cable end, on Socket straight M12, coding: A, cable length: 10 m

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

2701362

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Omnidirectional antenna for wall mounting, frequency band: 2.4 GHz, gain: 2 dBi, degree of protection: IP65, connection: RSMA (male), incl. 1.5 m connecting cable, mounting bracket, and mounting material

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

2885919

<https://www.phoenixcontact.com/gb/products/2885919>



Omnidirectional antenna for wall or mast mounting, 2.4 GHz, gain: 6 dBi, degree of protection: IP67, saltwater-resistant, shock- and vibration-resistant, connection: N (female), incl. mounting bracket and mast clamps, ATEX and IECEx approval

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ANT-OMNI-5900-01 - Antenna

2701347

<https://www.phoenixcontact.com/gb/products/2701347>

Omnidirectional antenna for wall or mast mounting, 5 GHz, gain: 5 dBi, degree of protection: IP64, saltwater-resistant, shock- and vibration-resistant, connection: N (female), incl. mounting bracket and mast clamps



ANT-DIR-2459-01 - Antenna

2701186

<https://www.phoenixcontact.com/gb/products/2701186>

Directional antenna for wall or mast mounting, 2.4 GHz / 5 GHz, gain: 9 dBi, degree of protection: IP67, shockproof: IK06, saltwater-resistant, connection: N (female), incl. mounting bracket and mast clamps, ATEX and IECEx approval



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

2903263

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Antenna cable, outside diameter: 5 mm (0.2 in.), inner conductor: solid, attenuation: 0.4 / 0.5 / 0.6 dB at 0.9 / 2.4 / 5.8 GHz, connection: N (male) -> RSMA (male), cable length: 0.5 m (1.6 ft.)

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

2903264

<https://www.phoenixcontact.com/gb/products/2903264>



Antenna cable, outside diameter: 5 mm (0.2 in.), inner conductor: solid, attenuation: 0.5 / 0.8 / 1.1 dB at 0.9 / 2.4 / 5.8 GHz, connection: N (male) -> RSMA (male), cable length: 1 m (3.3 ft.)

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

2903265

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Antenna cable, outside diameter: 5 mm (0.2 in.), inner conductor: solid, attenuation: 0.9 / 1.3 / 2.0 dB at 0.9 / 2.4 / 5.8 GHz, connection: N (male) -> RSMA (male), cable length: 2 m (6.5 ft.)

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

2903266

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Antenna cable, outside diameter: 5 mm (0.2 in.), inner conductor: solid, attenuation: 1.2 / 2.0 / 3.0 dB at 0.9 / 2.4 / 5.8 GHz, connection: N (male) -> RSMA (male), cable length: 3 m (10 ft.)

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RAD-PIG-RSMA/N-5 - Antenna cable

2702140

<https://www.phoenixcontact.com/gb/products/2702140>

Antenna cable, outside diameter: 5 mm (0.2 in.), inner conductor: solid, attenuation: 2.0 / 3.3 / 4.8 dB at 0.9 / 2.4 / 5.8 GHz, connection: N (male) -> RSMA (male), cable length: 5 m (16 ft.)



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PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk