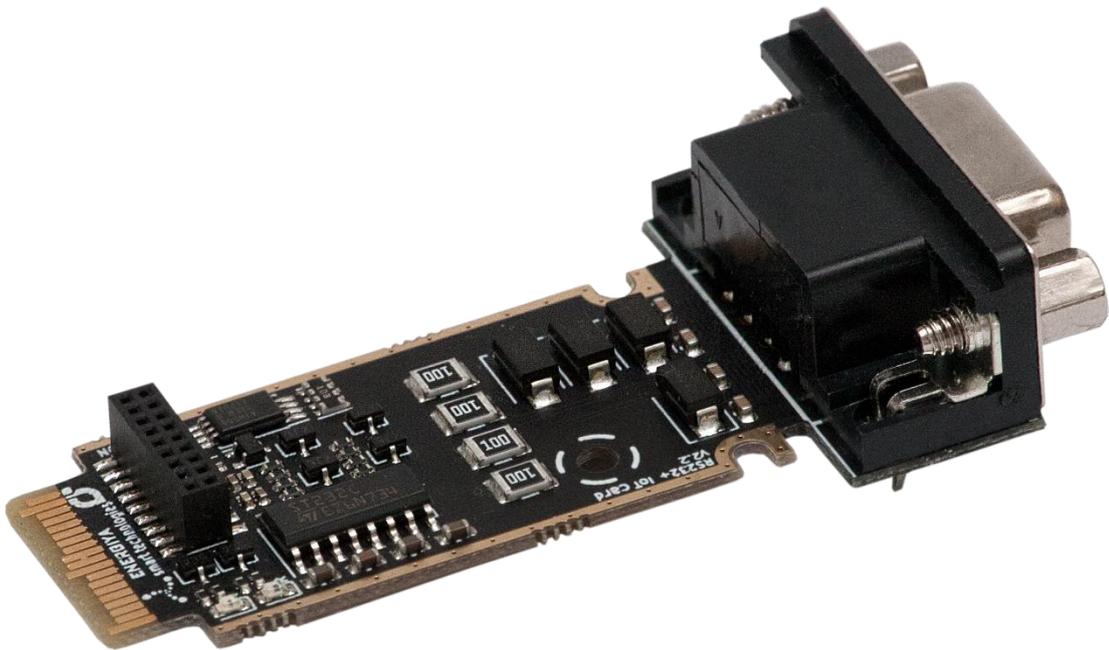


# RS2+

RS232 + IoT card

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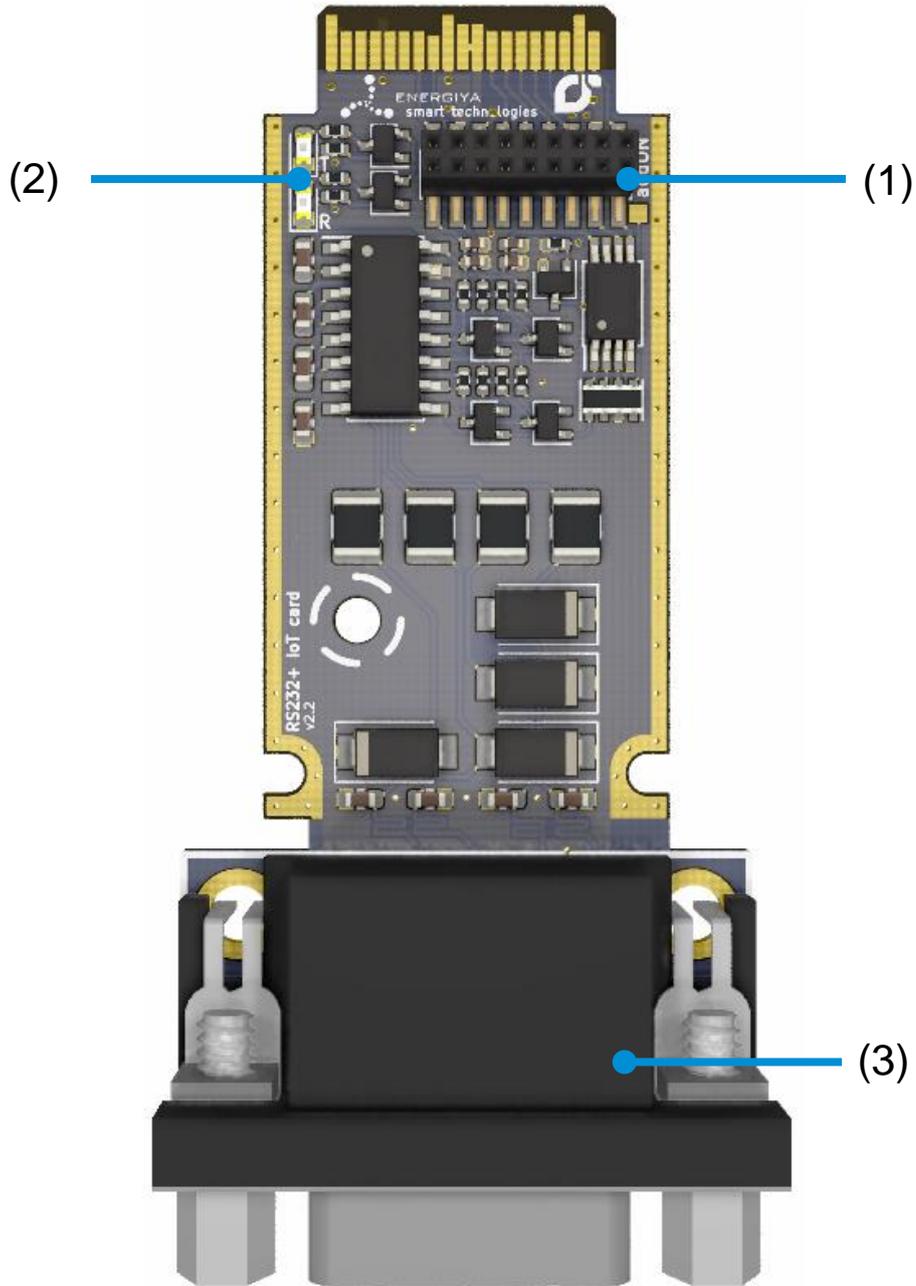


fig. 1

- 
- (1) addON socket
  - (2) RXD and TXD LEDs
  - (3) Female DB9 connector
-

## Description

The RS232+ IoT card is the standard EIA232 serial interface.

Thanks to a special connector, the device has the possibility to extend its functionality with addON expansion cards.

The IoT card is compatible with mangOH Green, Red, Yellow and FX30 / FX30S.

## Mounting the card in the host

It is recommended to install the IoT card when the power is off to avoid accidental short circuits. If the card is installed with the power on, it is necessary to reboot the program.

Depending on the device used, the card is mounted using standoffs/spacers (mangOH) or rails (FX30). The IoT card also have dedicated cover for locking inside FX30.



**Important!** Never mount or remove the addON card with power on!

## Mounting the card in FX30 / FX30S

The construction of the RS232 (DB9) connector seems to make it impossible to screw on the IoT card cover screws in the FX30 / FX30S case.

There is an easy way to screw in the cover screws. You will need a small screwdriver and universal pliers or a small wrench (see figure 2).



fig. 2

First of all, remove the hex screws from the RS232 connector using universal pliers or a small wrench (see figure 3, number 1). This will give you free access to the screws that fix the card cover. For this purpose, we use a thin screwdriver, which we put through the hole after removing the hex screws (see figure 3, number 2).



fig. 3

At the end, after securing the card inside FX30 / FX30S, screw the hex screws back to the RS232 connector.

### Description of the DB9 female connector

The following figure and table shows the description of the female pins of the DB9 connector on the IoT card. The described pins are active and the arrows indicate the data flow direction (DCE).

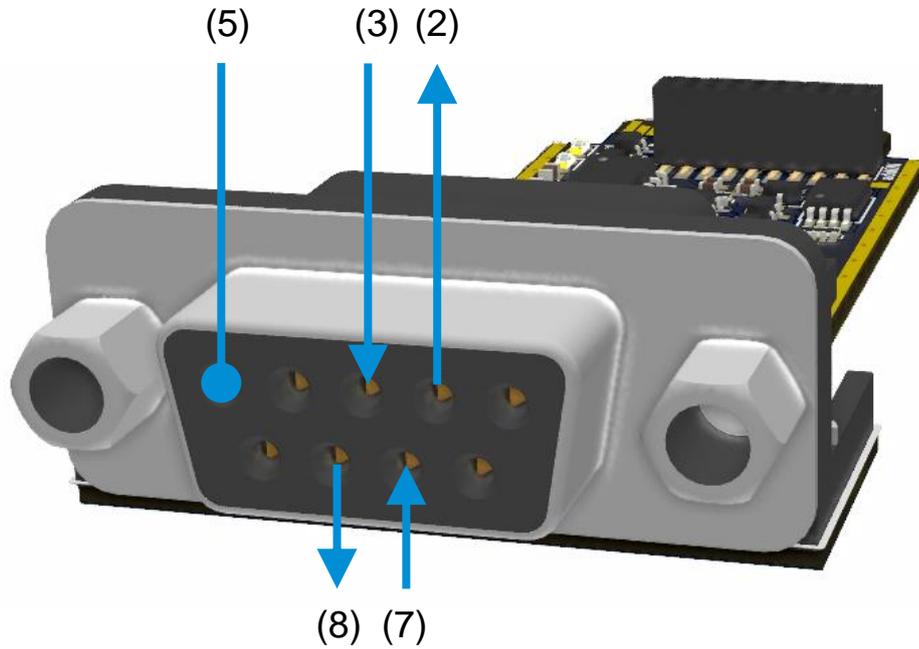


fig. 4

pin 2	TXD
pin 3	RXD
pin 5	common
pin 7	CTS
pin 8	RTS

## Specifications

Dimensions (W x H x D)	31.0 x 66.0 x 17.5 mm
Operating temp	-40 to +85°C
Weight	13 g
Current consumption	7 mA
Flow control	yes (CTS/RTS)
Interface connector type	female DB9
Max recommended cable length	15 m
ESD protection	yes
addON socket	yes
Latching cover for FX30	yes

## Troubleshooting

Lack of communication	check the cable connection, check the CTS/RTS if required, check for a short circuit
Communication errors	check baud rate, check grounding

Send us your feedback and suggestion to help us improve our products! 😊 [info@energiya.pl](mailto:info@energiya.pl)



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