1W-H3-03 M12

RFID reader | 125 kHz | Unique

Product Card

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Before use…

- *Please do not open the reader and do not make any changes. This results in loss of warranty.*
- *In case of any questions please contact with us. We certainly answer to all questions and solve possible problems.*
- *Please carefully read the following information before connecting the reader.*
- *Please keep in mind, that there are factors as metal surfaces, which can affect on radio communication and correct reader operation. It is advisable to consult the mounting conditions before use with our staff.*
- *Please contact with us before sending damaged products.*
- *We offer possibility to change cable length and terminate it with a plug. Before make an order please contact with us to determine the details.*



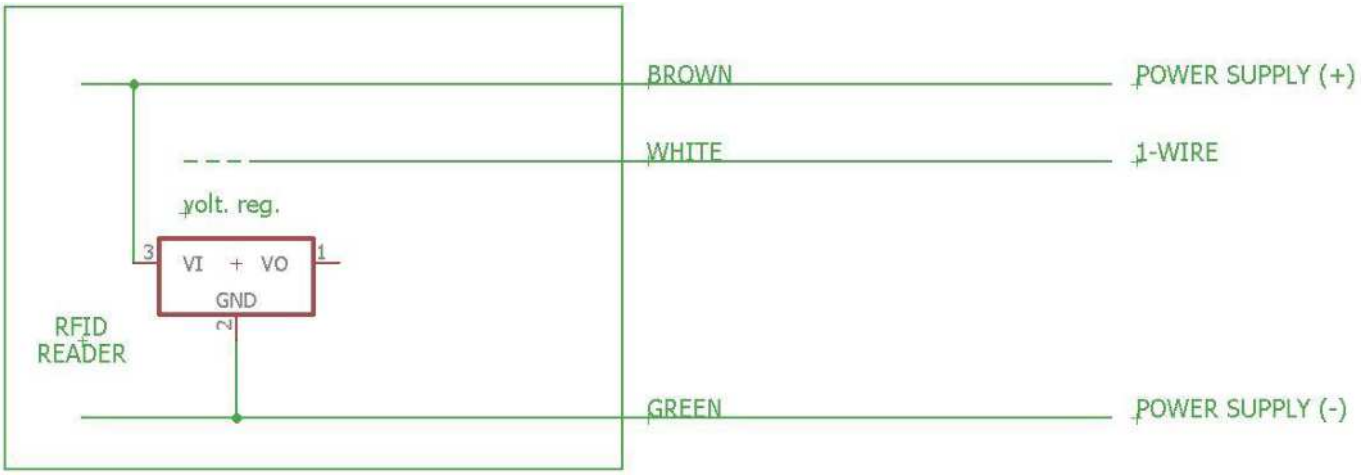
General information

The RFID reader **1W-H3-03 M12** reads identification data wireless of passive transponders (cards, tags, etc.) compatible with UNIQUE standard.

Green – power supply (-)
Brown – power supply (+)
White – 1-Wire

The reader should be connected according to the scheme "A".

SCHEME A



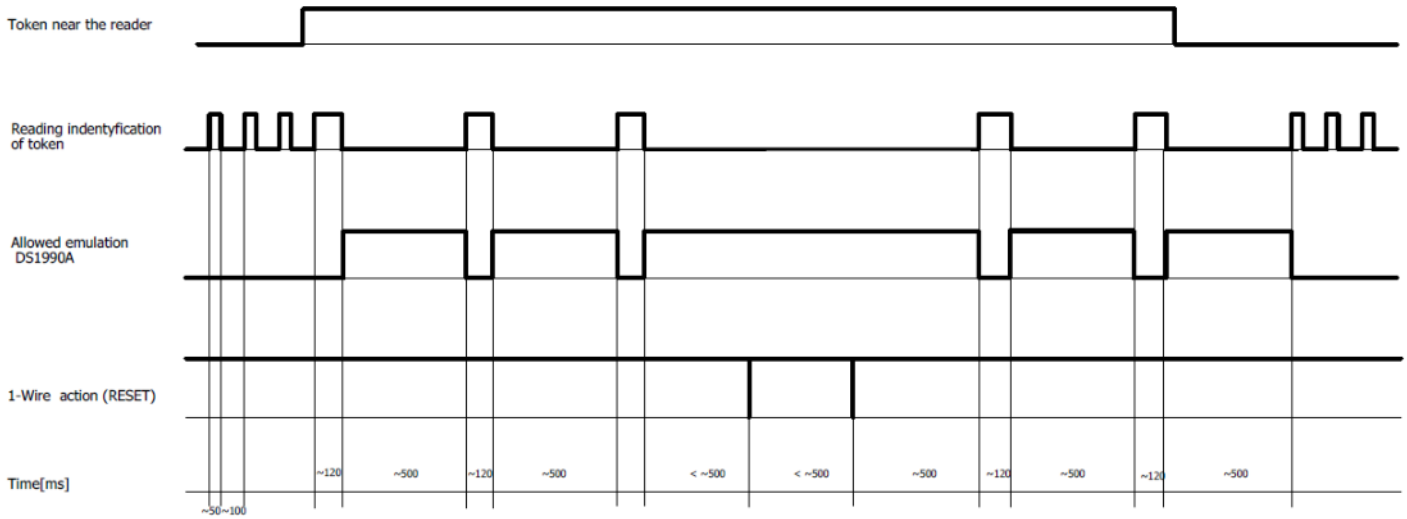
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DS1990A emulation

After successful parity bits check, collected data (manufacturer code and serial number) are sent via 1-Wire interface, emulating the MAXIM DS1990A

Checksum	Constant value	Manufacturer code	Serial number	code DS1990A
CRC	0x00	1 byte	4 bytes	0x01

MSB LSB

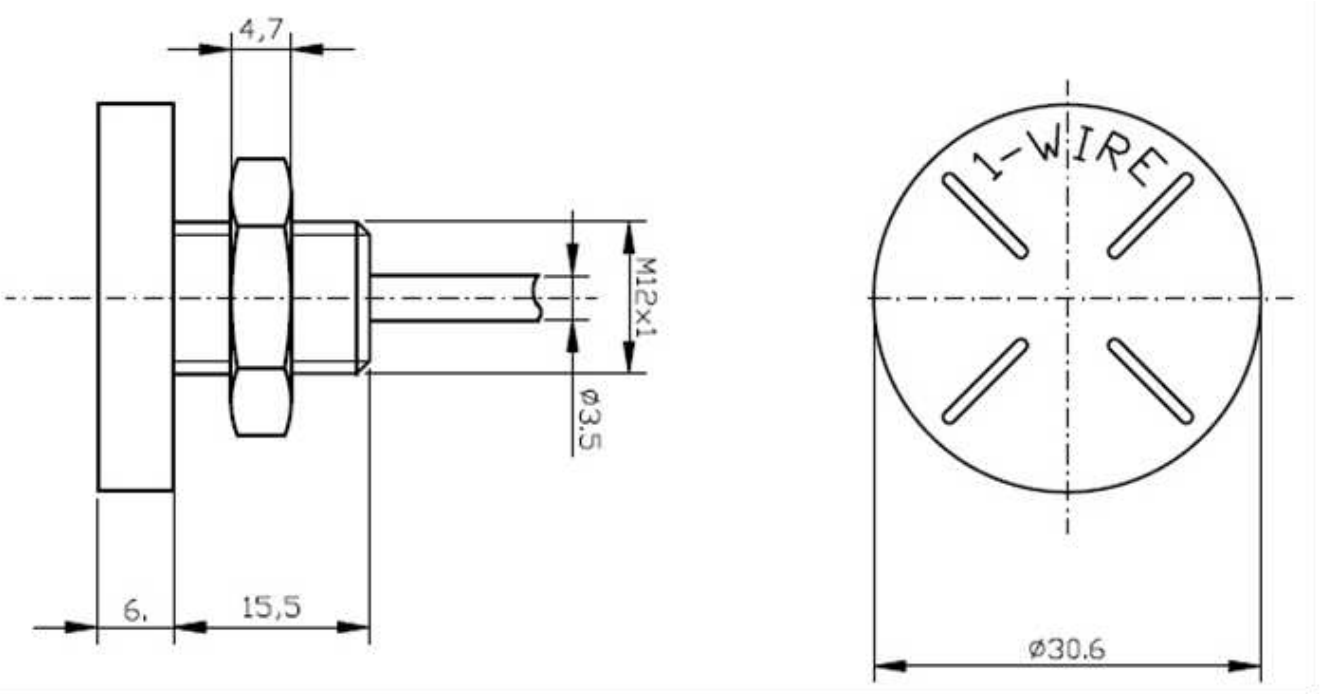


1. The reader is waiting for the proximity of the token (card) trying to read it at a frequency of about 6 times per second. (~ 50 ms [checking the presence of the card] + ~ 100 ms [gap between successive checks]).

2. After the token is approached, its identifier is read (~ 120 ms) and it is stored for a period of ~ 500 ms during which it is possible to emulate the read number as the MAXIM iButton DS1990A.

3. If during this ~ 500 ms on the 1-wire bus no RESET pulse initiating the transmission appears, the identifier is forgotten and the reading is repeated. Otherwise, the time of remember the identifier will be extended for another 500 ms from the moment of the RESET pulse.

External dimensions



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Technical Data

Power supply	6,5-30 V DC
Nominal power supply voltage	12 V DC
Peak current	30 mA
Receiver current	12 mA
Frequency	125 kHz
Type of transponder	Manchester, 64 cycles per bit
Powierzchnia anteny	6,8 cm^2
Reading range	~4cm
Frequency range of the reader	119-140 kHz
Nominal frequency of the reader	125 kHz
Reading frequency	6/s for identification 2/s when transponder is in range of the reader
Supported 1-Wire commands	0x33 (0x0F) - Read ROM 0xF0 - Search ROM
Mounting method	M12 Thread – maximum subtrate thickness 10,5 mm
Cable length	0,4 m
The maximum length of power and signal connections	2 m
Reader temperature	-20° C +55° C
ROHS	YES

The device cannot be powered from the DC network. It must be connected to the power supply via a 1A short-circuit protection.

The device marking is located on the bottom of the housing.