1W-H3-05 M12

**RFID reader | 125 kHz |
UNIQUE | HID | HITAG 1,2,S | JABLOTRON**

_____

Product Card

DEMIURG&DREXIA

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 contact with us before sending damaged products.

We offer possibility to change input voltage range, cable length and terminate it with a plug. Before make an order please contact with us to determine the details.

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.

DEMIURG & DREXIA SP. Z O.O.
ul. Ekonomiczna 30
93-426 Łódź
www.drexia.pl
biuro@drexia.pl

1W-H3-05 M12 – Product Card

01-04-2025

General Information

The RFID reader **1W-H3-05 M12** reads identification data wireless of passive transponders (cards, tags, etc.) compatible with UNIQUE, HID, HITAG 1,2,S, JABLOTRON standard.
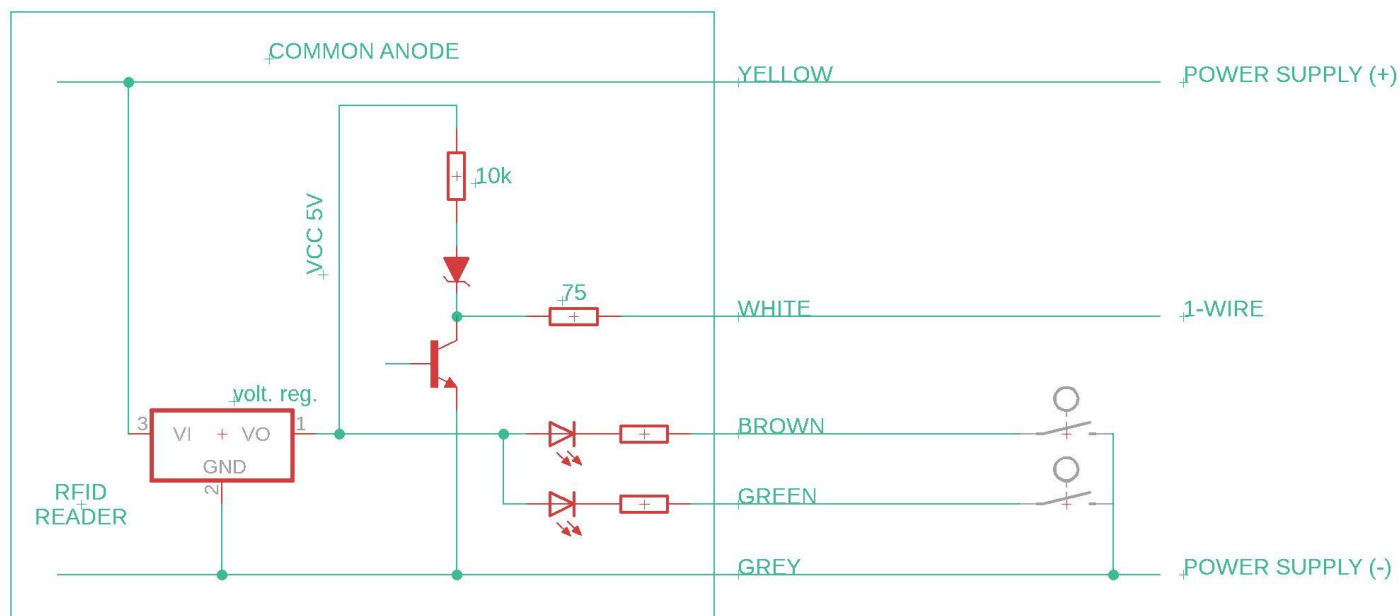
The built-in two-color LED for any use. The red LED cannot be used to indicate failure or danger.

LEDs are powered by internal voltage regulator via built-in resistor. The light is on when the appropriate LED is connected to the minus of power supply.

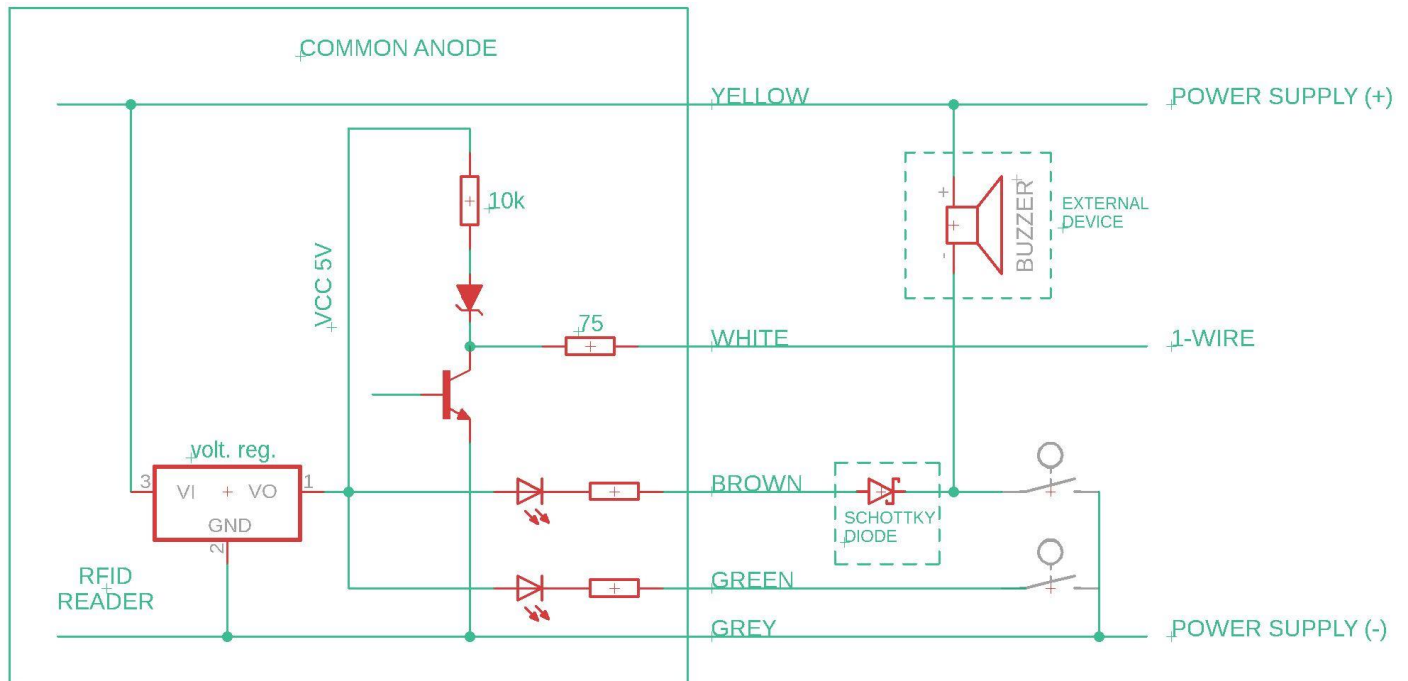|		
Grey	–	power supply (-)
Yellow	–	power supply (+)
Green	–	green LED
Brown	–	red LED
White	–	1-Wire

The reader should be connected according to the scheme "A". In case of necessity of simultaneous control of LED and other devices (e.g. Buzzer) connect the reader according to the scheme "B":

SCHEME A

DEMIURG & DREXIA SP. Z O.O.
ul. Ekonomiczna 30
93-426 Łódź
www.drexia.pl
biuro@drexia.pl

1W-H3-05 M12 – Product Card

01-04-2025

SCHEME B

DEMIURG & DREXIA SP. Z O.O.
ul. Ekonomiczna 30
93-426 Łódź
www.drexia.pl
biuro@drexia.pl

1W-H3-05 M12 – Product Card

01-04-2025
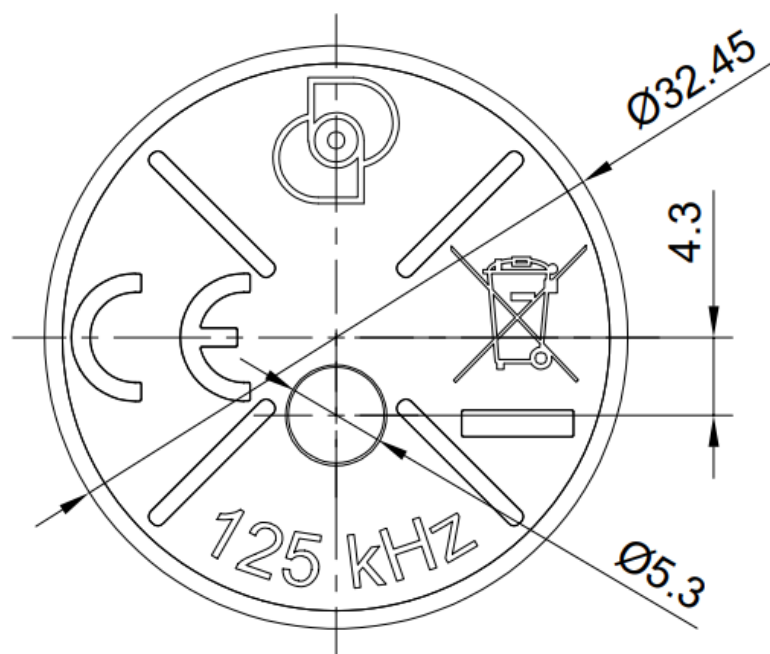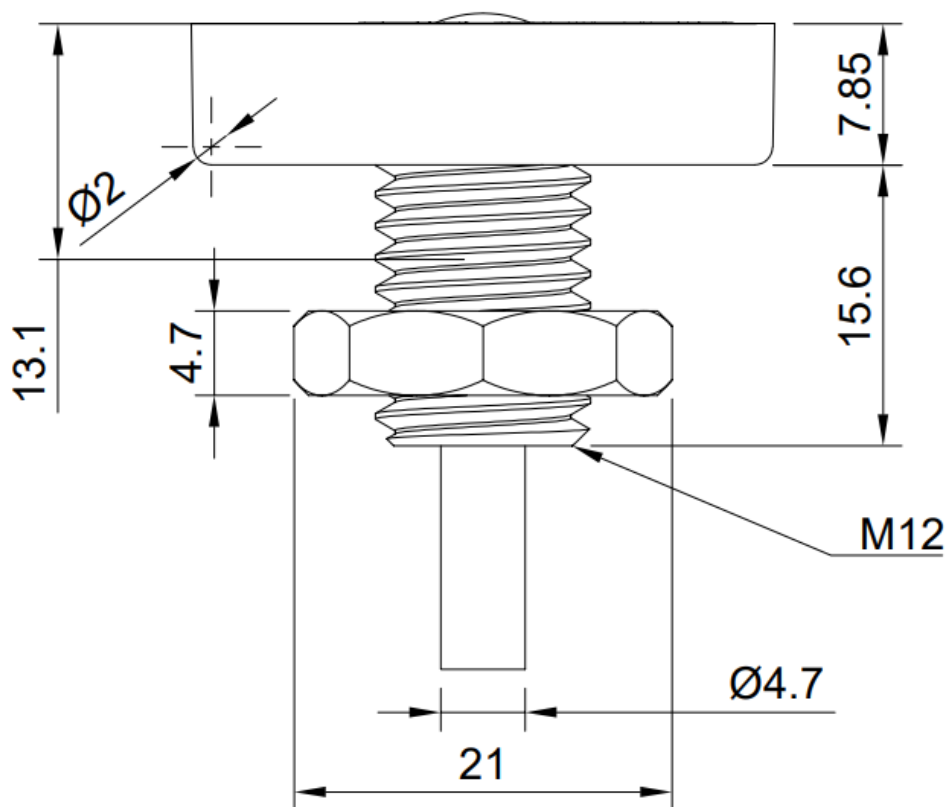
After reading the card, the collected data is sent via the 1-Wire interface, emulating MAXIM's DS1990A ID. The first byte is Family Code 0x01, the next 6 bytes to the UID code of the read card are sent from the least significant UID bytes. If the UID is shorter than 6 bytes, the most significant bytes are padded with zeros. The last byte is the CRC checksum of the previous 7 bytes. Each byte sent is sent starting from the least significant bit of the LSB.

Checksum	Card UID	code DS1990A
CRC	6 bytes	0x01

MSB   LSB

To read the UID of the token, bring the token closer to the RFID reader. Token UID readings are performed cyclically every 250 ms. After correct reading of the identifier, the DS1990A system from Maxim (Dallas) is emulated through the 1-Wire interface.

External dimensions

DEMIURG & DREXIA SP. Z O.O.
ul. Ekonomiczna 30
93-426 Łódź
www.drexia.pl
biuro@drexia.pl

1W-H3-05 M12 – Product Card

01-04-2025

Technical Data

Power supply	6,5-30 V DC
Nominal power supply voltage	12 V DC
Power supply efficiency	1 A
Peak current	50 mA
Receiver current	12 mA (without LED)
Green LED current	10 mA
Red LED current	10 mA
Frequency	125 kHz
Type of transponder	UNIQUE, HID, HITAG 1,2,S, JABLOTRON
Surface of the antenna	6,8 cm^2
Reading range	~4 cm
Frequency range of the reader	119-140 kHz
Nominal frequency of the reader	125 kHz
Reading frequency	4/s
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

It is possible to order products with other supply voltages.

For a product with a 5V DC power supply, please specify the product name when ordering:
1W-H3-05 M12 (5V)

DEMIURG & DREXIA SP. Z O.O.
ul. Ekonomiczna 30
93-426 Łódź
www.drexia.pl
biuro@drexia.pl   **1W-H3-05 M12 – Product Card**   **01-04-2025**