DREXIA

1W-H0-04P (K)* MS

RFID reader | 13.56 MHz | Multi System

Product Card

**** Letter K refers to a reader with a common cathode.***

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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 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.

The RFID reader **1W-H0-04P (K) MS** reads identification data (UID) wireless of passive transponders (cards, tags, etc.) compatible with ISO/IEC14443-3-A (e.g. MIFARE cards), ISO/IEC14443-3-B, ISO 15659, Felica, iClass, ISO 18092.

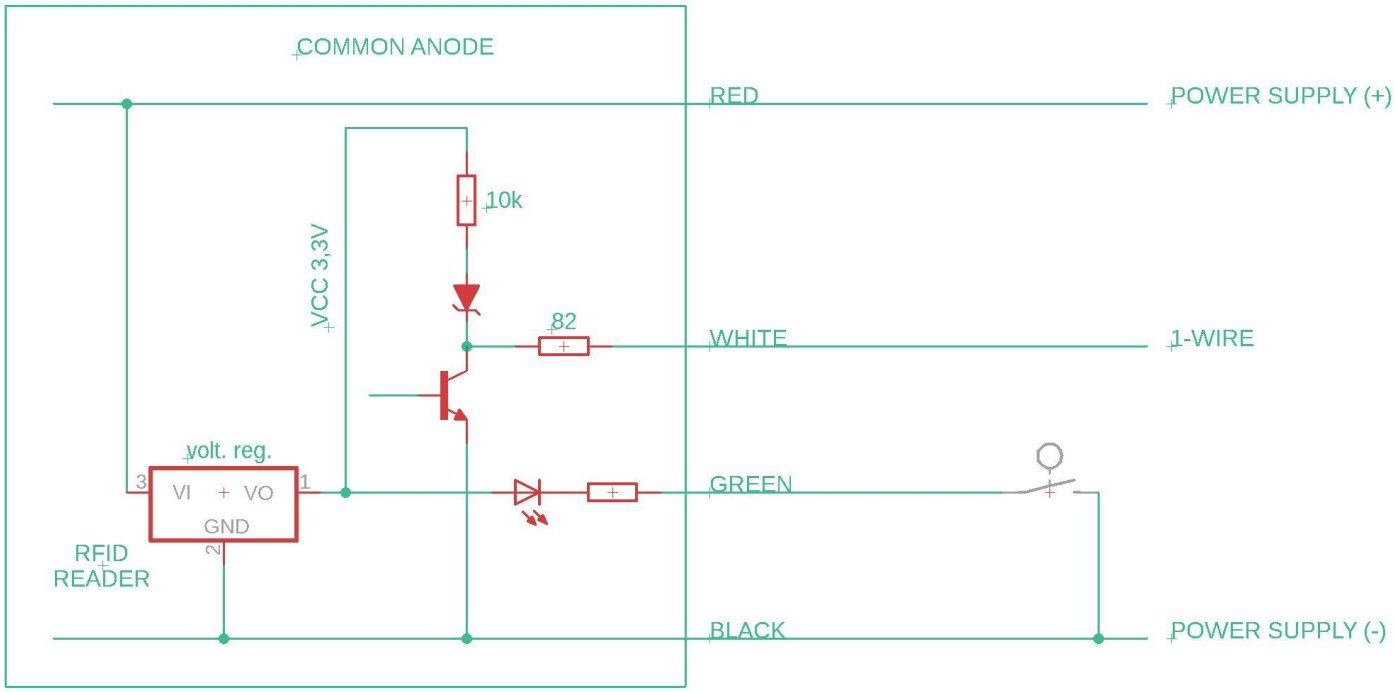
The built-in one-color LED for any use. The red LED cannot be used to indicate failure or danger.

LED is 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.

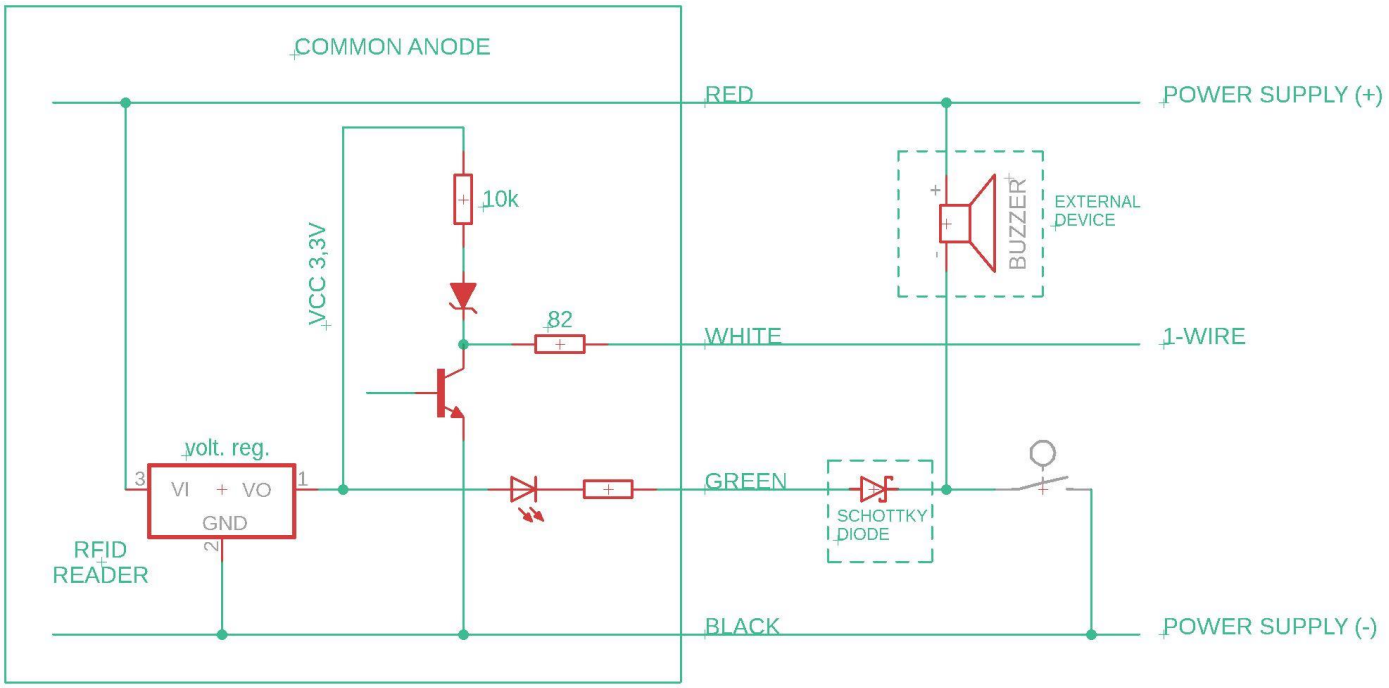
Black	–	power supply (-)	
Red	–	power supply (+)	
Green	–	red LED	cathode (anode for „K" version)
White	–	1-Wire	

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



SCHEME B

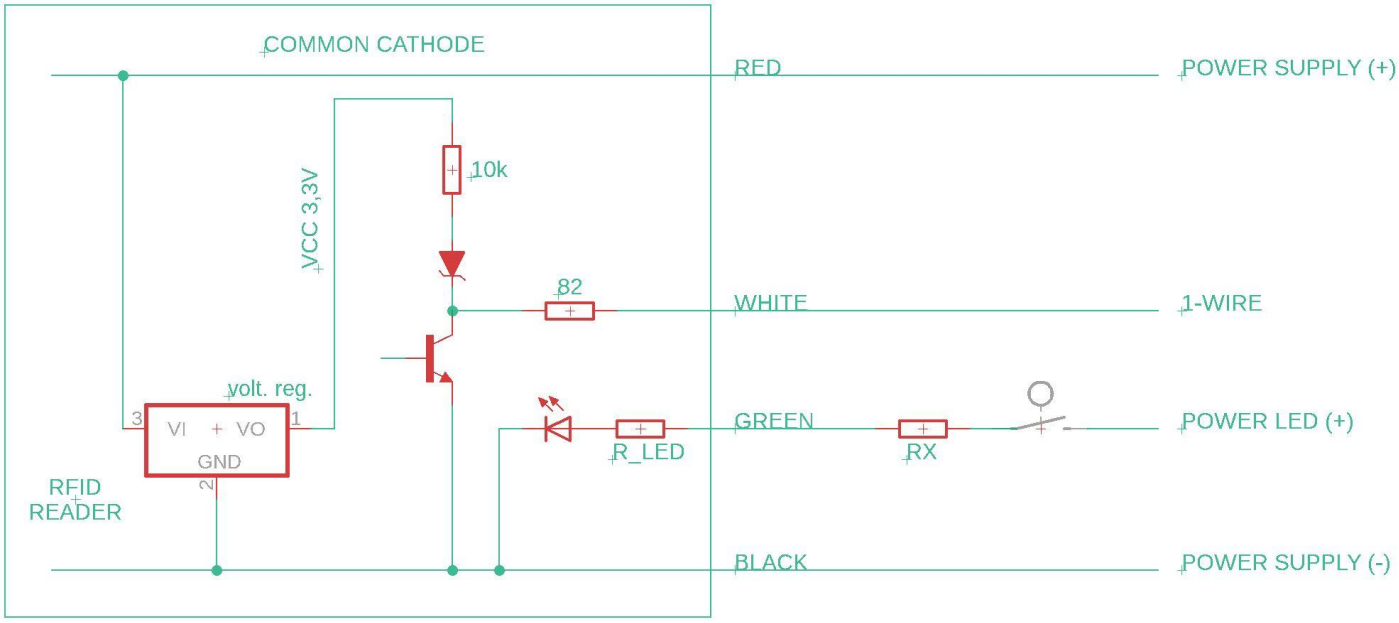


For product with common cathode: LED connected in series with a resistor 220R has a cathode connected to the negative power supply. LED is activated when is connected to plus of power supply. To connect more than 5V, it is advised to use external resistor to avoid exceeding the maximum LED current. Minimum value of resistor can be calculated from the formula:

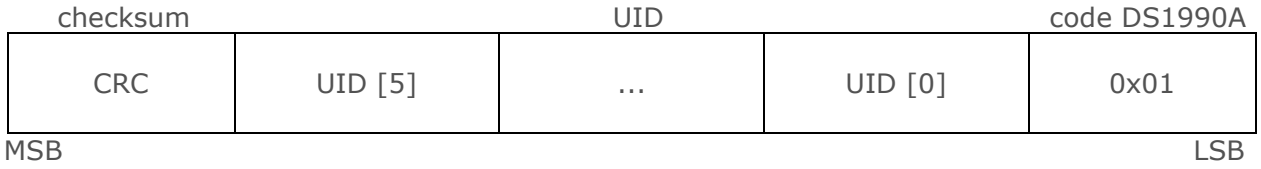
$$R_x = \frac{(Us-1.6V)}{Id} - 220\Omega$$

where:
R_x – External resistor Us – Power supply voltage of LED Id – LED current (max. 10mA)
Connect the reader according to the scheme „C”:

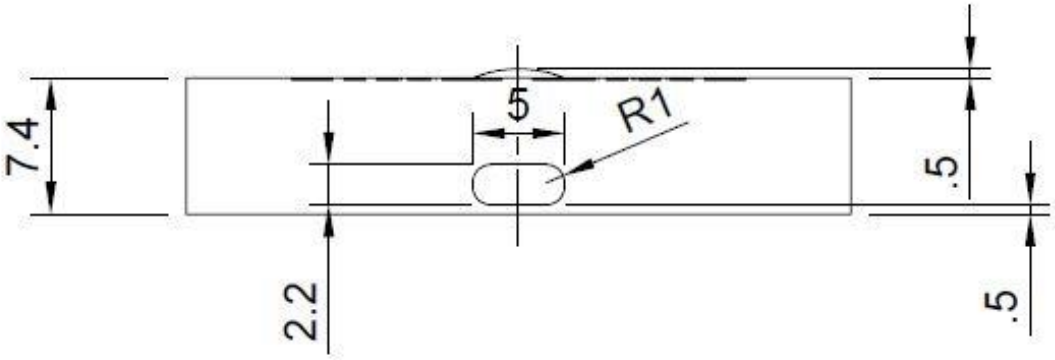
SCHEME C

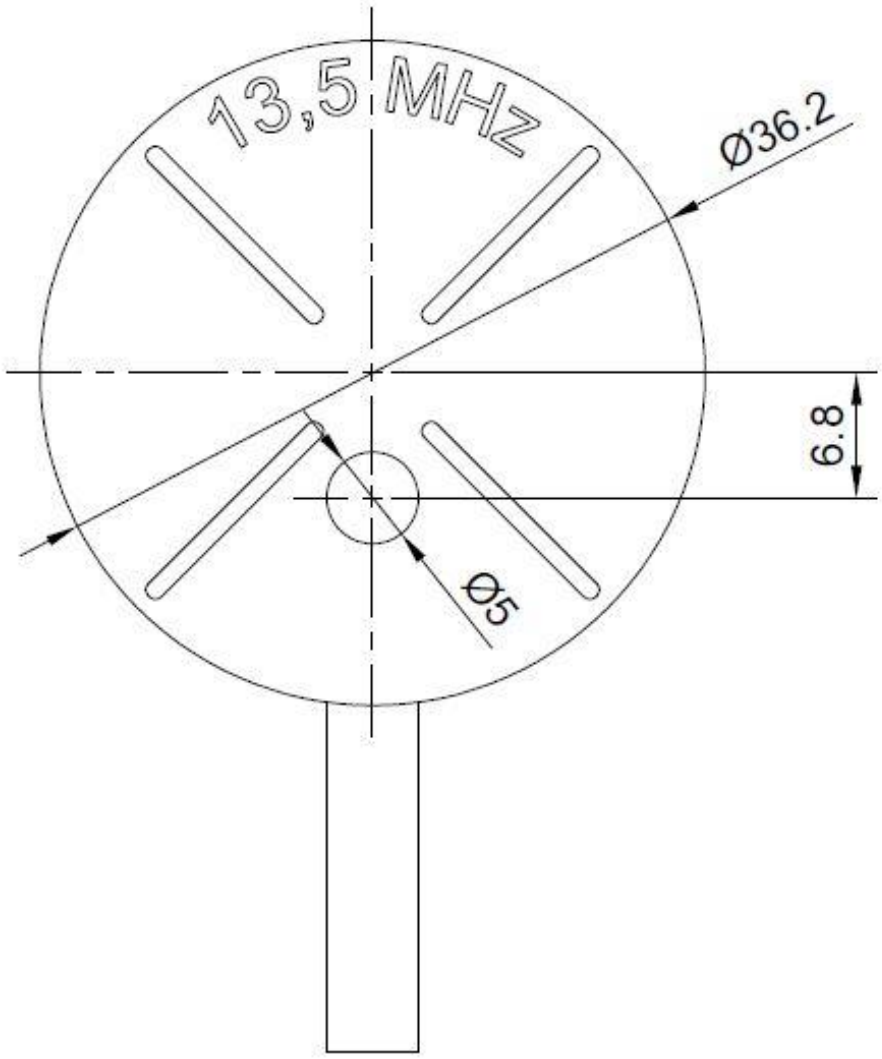


The reader sends the read UID data of the token via the 1-Wire interface, emulating the DS1990A identifier from Maxim (Dallas). In the DS1990A chip from Maxim (Dallas), 6 bytes of UID are allocated for the identifier. Therefore, for tokens with a UID longer than 6 bytes, the 6 least significant bytes of the UID are sent. In the case of tokens with a UID shorter than 6 bytes, the missing (most significant) bytes of the identifier are filled with zeros.



To read the UID of the token, bring the token closer to the RFID reader. Token UID readings are performed cyclically every 500 ms. After correct reading of the identifier, the DS1990A system from Maxim (Dallas) is emulated through the 1-Wire interface.


7.4
5
R1
.5
2.2
.5


13,5 MHz
Ø36.2
6.8
Ø5

Technical Data

Power supply	5-30 V DC
Power supply efficiency	1 A
Peak current	60 mA
Average receiver current	30 mA (without LED)
Peak receiver current	50 mA
Red LED current	7 mA (for „K" version do not exceed 10 mA)
Frequency	13,56 MHz
Type of transponder	ISO/IEC14443-3-A, ISO/IEC14443-3-B, ISO 15693, Felica, iClass, ISO 18092
Surface of the antenna	8,6 cm^2
Reading range	3-7 cm depending on token
Reading frequency	2/s
Supported 1-Wire commands	0x33 (0x0F) - Read ROM 0xF0 - Search ROM
Mounting method	tape, glue, etc.
Cable length	0,4 m (flat cable)
Reader temperature	-20° C +55° C
ROHS	YES

It is possible to order products with a different LED configuration.

For a product with a common cathode LED configuration, please provide the product name:
1W-H0-04KP MS

It is possible to order products with other supply voltages.

For a product with a 3,3V DC power supply, please specify the product name when ordering:
1W-H0-04P MS (3V3) or 1W-H0-04KP MS (3V3) (for Cathode configuration)

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