RS-H0-06 BZ M12 MS

RFID reader | 13.56 MHz | Multi System

FCC ID: 2BEXQRSH006BZM12MS1

Made in Poland

_____

Product Card

DREXIA Tomasz Wojtasik
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www.drexia.pl
biuro@drexia.pl   **RS-H0-06 BZ M12 MS – Product Card**   **06-02-2024**

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 input voltage range, cable length and terminate it with a plug. Before making an order, please contact with us to determine the details.

The RFID reader **RS-H0-06 BZ M12 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 two-color LED and Buzzer for any use. The red LED cannot be used to indicate failure or danger.

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

BUZZER is activated when appropriate BUZZER output is connected to the minus of power supply.

Grey	–	power supply (-)
Yellow	–	power supply (+)
Green	–	green LED
Brown	–	red LED
White	–	TX
Pink	–	Buzzer

The reader should be connected according to the scheme:

SCHEME
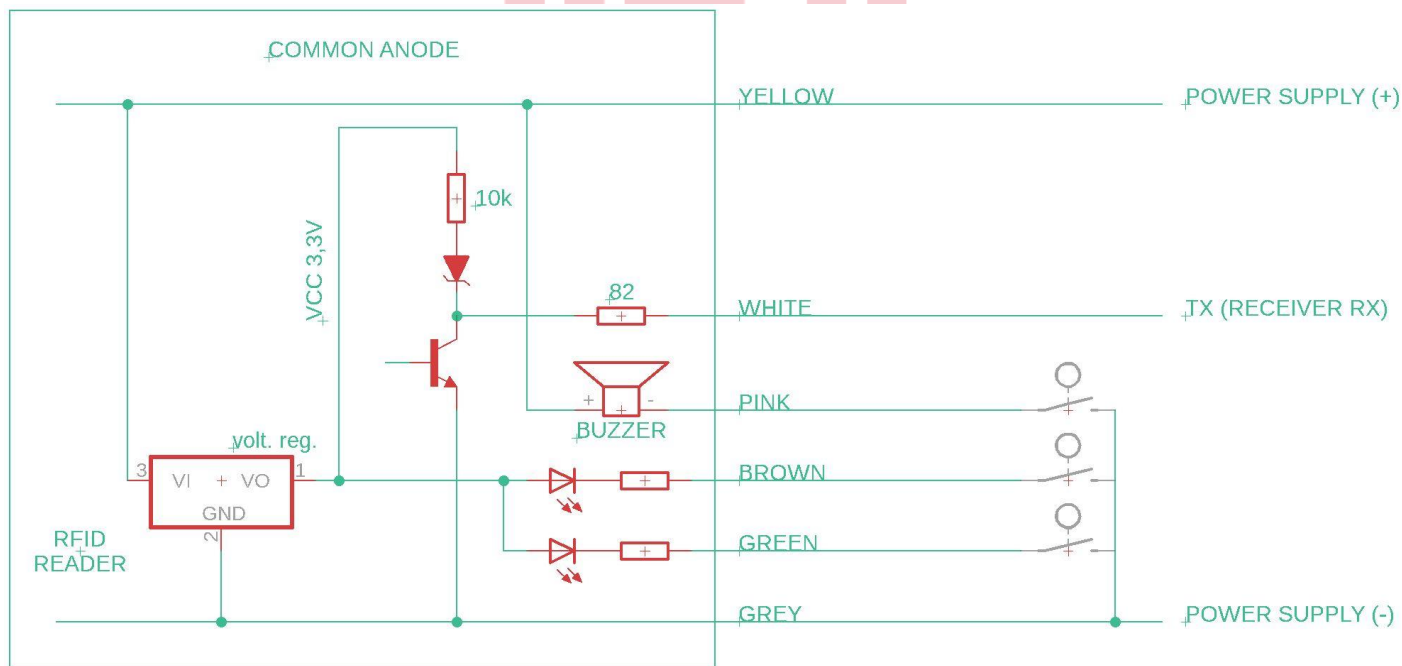
The read data are sent as ASCII string via UART open collector. For transponder UIDs of 4 bytes, ASCII string of 12 sings is sent. While, for UIDs of 7 or 10 bytes, string of 18 or 24 bytes is sent.

For example, for UID of 4 bytes, data is sent in following order:

START	UID [3]	UID [2...1]	UID [0]	Checksum CRC	STOP
0x0A (LF)	2 ASCII signs MSB LSB	4 ASCII signs MSB LSB	2 ASCII signs MSB LSB	2 ASCII sgins MSB LSB	0x0D (CR)

Byte START and byte STOP help us identify the string we are receiving. Checksum is calculated as the XOR function of data read from the transponder.

For example:

For card with UID = 10DB8274

CRC = (10h) XOR (DBh) XOR (82h) XOR (74h)=3Dh

the following string will be output:

LF	1	0	D	B	8	2	7	4	3	D	CR
0x0A	0x31	0x30	0x44	0x42	0x38	0x32	0x37	0x34	0x33	0x44	0x0D

The reader is waiting for the proximity of the token (card) trying to read it. Each re-read attempt is made in cycles every 500ms. After correct reading of the identifier, ASCII characters are sent via the UART open collector interface.

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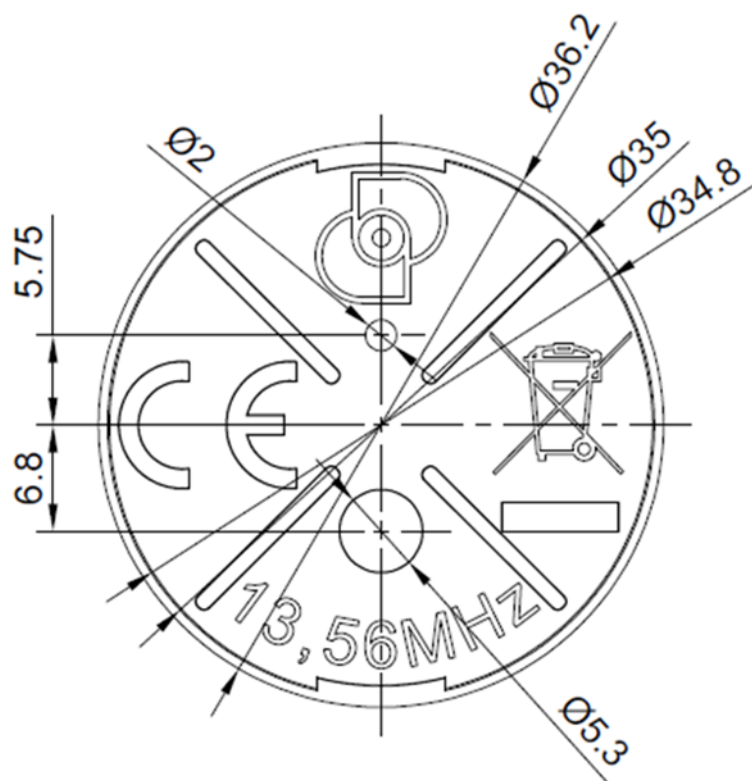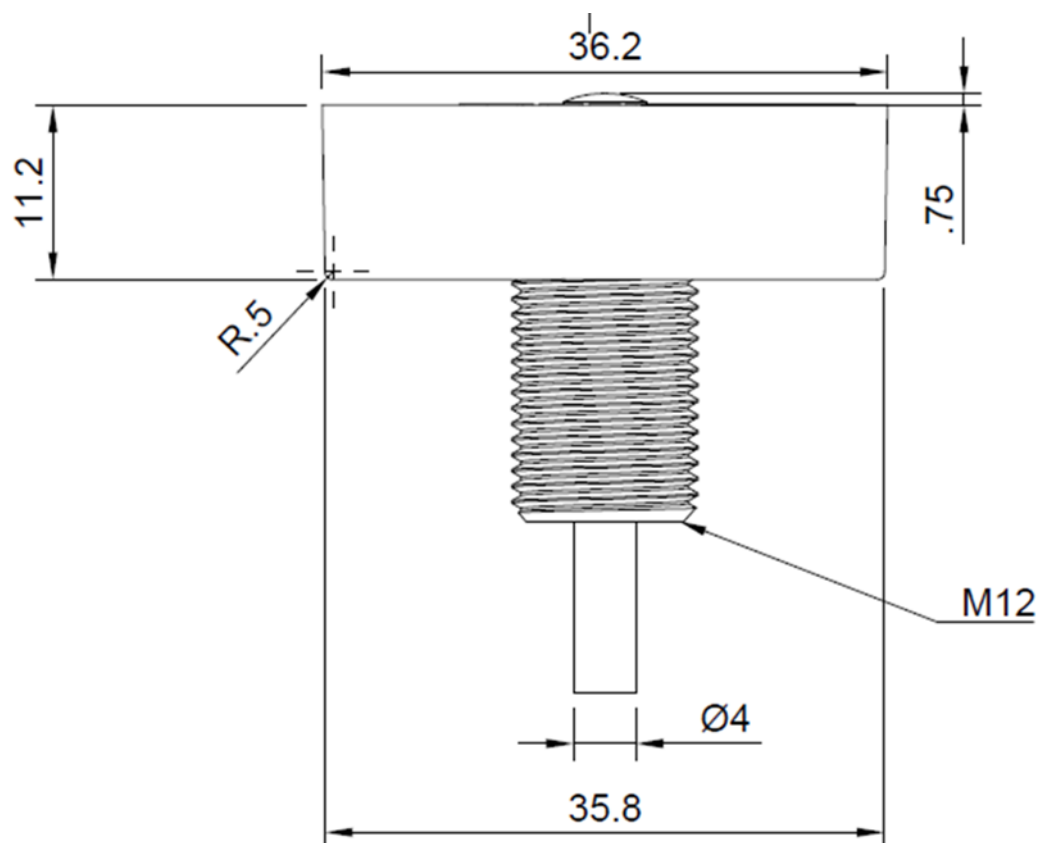
Power supply	12 V DC (8-16 VDC) and 24V DC (20-30 VDC)
Power supply efficiency	1 A
Peak current	150 mA
Average receiver current	30 mA (without LED)
Peak receiver current	50 mA
Green LED current	6 mA
Red LED current	6 mA
Buzzer current	35 mA
Peak Buzzer current	70 mA
Frequency	13,56 MHz
Type of transponder	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
UART	TTL – open collector, active state 0, 9600 bps, 8 bits, without parity and 1 stop bit (8N1).
Mounting method	M12 Thread
Cable length	0,4 m
Reader temperature	-20° C +55° C
ROHS	YES

FCC Radio Product Manual

FCC Information

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

(1) This Device may not cause harmful interface, and

(2)This Device must accept any interference received, including interference that may cause undesired operation.

Note : This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures ;
1.1. Reorient or relocate the receiving antenna.
1.2. Increase the separation between the equipment and receiver.
1.3. Connect the equipment into an outlet on a circuit different from that to
   which receiver is connected.
1.4. Consult the dealer or experienced radio/TV technician for help.

WARNING

   Changes or modifications not expressly approved by the manufacturer could void the user's

   authority to operate the equipment.

CAUTION : Exposure to Radio Frequency Radiation.(If not subject to measurement SAR)

   To comply with FCC's RF exposure limits for general population / uncontrolled exposure, the

   antenna(s) used for this transmitter must be installed to provide a separation distance of at

   least 20cm from all persons and must not be co-located or operating in conjunction with any

   other antenna or transmitter.

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The following label was attached to collective packaging for many pieces of RFID readers:

```
RFID card reader: RS-H0-06 BZ M12 MS    CE
Fq: 13,56 MHz
Amount [pcs]:    _____
                                         [crossed-out wheelie bin symbol]
Cable length [cm]: _____
                                         RoHS
Quality control: _____

Quantity control:_____

Serial no.:       _____          FCC ID :
                                       2BEXQRSH006BZM12MS1
DREXIA                                  Made in Poland
   This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:  DREXIA Tomasz Wojtasik
 (1) This device may not cause harmful interference, and  Ekonomiczna 30
 (2) This device must accept any interference received,    93-426 Łódź, Poland
including interference that may cause undesired operation.
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The following label was attached to product:

FCC ID: 2BEXQRSH006BZM12MS1