

RFID CONTROLLER Locky – BT



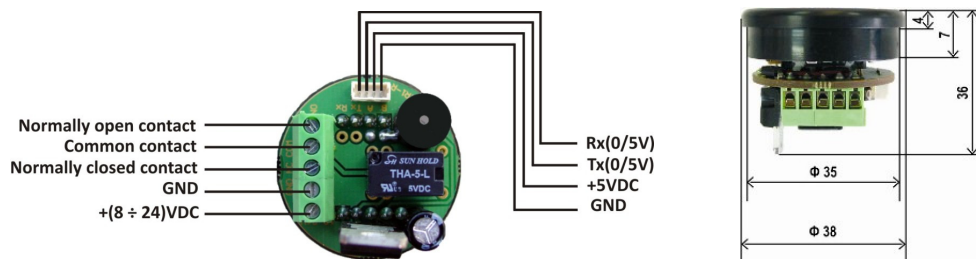
Short description:

Locky-BT is an electronic device intended for construction of access control systems, managed by computer or specialized devices. The controller works with RFID tags in the form of cards, key fobs and stickers. It is formed as a button, in which are embedded controller and the reading antenna.

Specifications:

- | | |
|---------------------------------------|----------------------------------|
| - Operating temperature range | -10 ÷ +40 °C; |
| - Power supply | 8 ÷ 24 VDC; |
| - Maximum consumption /with ON relay/ | 70 mA; |
| - Contact rating | 60V / 0.3A; |
| - Reading range | ≤ 3cm; |
| - Dimensions | Φ 38mm x 36mm; |
| - RFID tags | 125kHz, EM4102 compatible; |
| - Memory | non volatile for up to 500 tags. |

Pin outs and dimensions:



Working mode:

The LED indicator shines in red.

If a tag is put in the range of antenna, the controller gives out a short beep and LED flashes one. Through the interface (in series) the number of the tag will be sent:

[F5][0B][0B][FF][80][64][55][3A][4E][35][01][D8]

Where:

- [F5] – start byte (constant);
- [0B] – length of packet, sum of all bytes without start byte – in this example 11 bytes;
- [0B] – command;
- [FF][80][64][55][3A][4E][35][01] – tag's number;
- [D8] – CRC, calculates by Polinomial = $x^8+x^5+x^4+1$ (for details see [AN27 of Maxim-IC](#)) – for this example 0xD8.

The relay of controller can be switch on by command:

[F5][04][16][05][3C]

Where:

- [F5] – start byte (constant);
- [04] – length of packet, sum of all bytes without start byte – in this example 4 bytes;
- [16] – command;
- [05] – time of holding on, in seconds – from 0 to 240, in this example 5sec.;
- [3C] – CRC, calculates by Polinomial = $x^8+x^5+x^4+1$

(for details see <http://www.maxim-ic.com/app-notes/index.mvp/id/27>) – for this example 0x3C. In case of wrong CRC, the controller will not execute the command.

The answer of controller to above command is:

[F5][03][96][99] .

The interface details are: 19200bps, 8 bits, 1 stop bit, No parity.

Attention: The interface of controller is TTL compatible (0/5V). To use it with PC or similar devices *Cable converter Locky USB / TTL* should be used.

Front panel variants:



Label 1
(yellow key)



Label 2
(gray background)



Label 3
(blue background)

Special mode /for advanced users only/

The functionality of controller can be changed to *Locky-BP* or *Locky-BF* by terminal *HT500* or by *LockyMonitor* software. For details see www.teracom.cc.