

# **Industrial RFID controller Locky-CT-RS**



## **Short description:**

Locky-CT-RS is an electronic device designed to control the access to facilities, elevators, automobiles etc. The controller works with RFID tags in the form of cards, key fobs and stickers. Locky-CT-RS is waterproof, utilizes industrial Ø 22mm plastic enclosure.

## **Options:**

- Can be programmed by service tag adding and group deleting identifiers;
- Can be programmed by LockyMonitor 2 software;
- Credit mode for each tag can set number of usage;
- Statistic mode every usage of tag is counted.

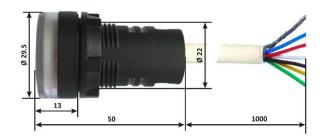
### **Specifications:**

Power supply

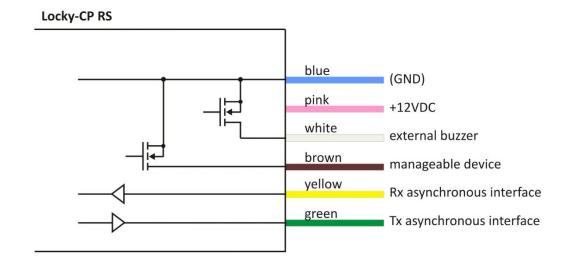
-	Maximum consumption	50mA @ 12V;
-	Maximum switchable voltage/current	
	for manageable device /Open Drain/:	15V / 1A;
-	Maximum switchable voltage/current	
	for buzzer /Open Drain/:	15V / 0.1A;
-	Reading range	≤ 3cm;
-	Operating temperature range	-20 to +70°C;
-	Dimensions	Ø 28mm x 50mm;
-	Installation hole	Ø 22mm;
-	Asynchronous interface	19200bps, 8 bits, 1 stop bit, No parity
-	RFID tags	125kHz, EM4102 compatible;
-	Memory	non volatile for up to 500 tags.

8-15VDC;

## Dimensions (mm) and pin-out:

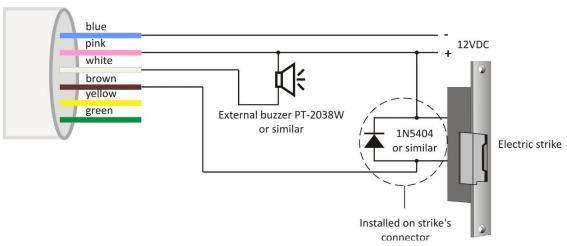


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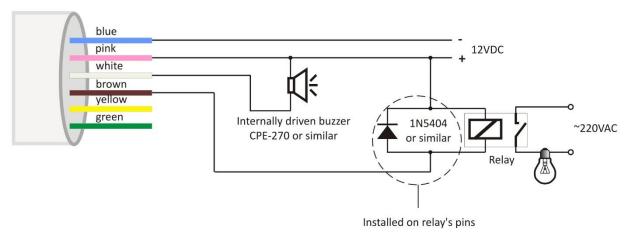


# Wiring diagrams:

### Locky-CP RS



#### Locky-CP RS



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## Working mode:

The LED indicator shines in red.

If a tag is put in the range of the antenna, the controller gives out a short beep and the LED flashes once. The tag's ID will be sent through the interface (in series):

[F5][08][0B][01][07][DB][7C][73][7B]

## Where:

- [F5] start byte (constant);
- [08] length of packet, sum of all bytes without start byte in this example 8 bytes;
- [0B] command;
- [01][07][DB][7C][73]- tag's ID;
- [7B]— CRC, calculates by Polynomial =  $x^8+x^5+x^4+1$  (for details see <u>AN27 of Maxim-IC</u>) for this example 0xD8.

The controller's relay can be switched on by the following command:

[F5][04][16][05][E7]

#### 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.;
- [E7] CRC, calculates by Polynomial = x^8+x^5+x^4+1 (for details see <a href="http://www.maxim-ic.com/app-notes/index.mvp/id/27">http://www.maxim-ic.com/app-notes/index.mvp/id/27</a>) for this example 0x3C. In case of wrong CRC, the controller will not execute the command.

The controller's answer 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 RS232.

Firmware update can be made by LockyMonitor2 software. It can be downloaded from <a href="https://www.teracomsystems.com">www.teracomsystems.com</a> .

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