



bibi-R32

Outdoor proximity reader



Technical data:

- identifiers: Unique transponders
- readout system: 125 kHz, ASK, Manchester
- range of card readout: at least 5 cm
- signalling elements: LEDs + buzzer
- interface: RS232 (9600 baud)
- connection length: up to 20 m
- power supply: 12V DC
- current consumption: 100 mA
- dimensions: 95 x 48 x 13 mm
- operating temperature: -30°C...+70°C
- available colours: black, light-grey

General device characteristics

The **bibi-R32** reader is destined for transponder (proximity cards) readout. It works at 125 kHz frequency and reads Unique type transponders with Manchester coding. The reader cooperates with a **bibi** system controller by sending it card numbers. It also controls diodes and the buzzer according to commands sent from the controller.

The reader has a durable and aesthetic casing made of a shock-proof polyamide. All electronic components are protected by vepuran which makes the reader resistant to atmospheric conditions. That is why it can be used both in- and outdoors. Its small dimensions allow installing it virtually anywhere.



Identifiers

The bibi system uses Unique type transponders. Each transponder of this type has its own 64-bit code, which is sent when the transponder is placed in the field of the reader's antenna.

Transponders can have different shapes and sizes. The size of a transponder depends on the size of the antenna used in it. Different sizes of antennas mean different readout ranges. The most popular are plastic cards and key-ring shaped transponders.

Communication with the controller

The reader, after reading a card number, sends it to the controller, while the controller sends commands to the reader which control its diodes. Apart from that the reader systematically sends its identification code to the controller. This allows the controller to alert the computer in case the connection with the reader is broken.

Connecting the reader

The reader is connected to the controller through the cable placed in the middle of the reader's back. Here are the functions of each wire:

Signal	Wire	Description
+12V	red	+12V power supply
GND	blue	ground (supply -)
E	screen	to controller's ground
TxD	green	sending line of the RS232 interface
RxD	white	receiving line of the RS232 interface

An example of a proper connection is shown on the following image:

