Operational manual

Praktika K-01 card collector

CONTENTS

List of abbreviations

PS   – power supply

ACS   – access control system

OD   – operating device

1. Product purpose

Card reader is designed for collection and storage of proximity access cards at the exit from the facility. Flexible logic of operation and connection of controller of the card reader allow it to be integrated with any type of access control system.

2. Delivery set

Table 1. Delivery set

Item	Qty, pcs.
Praktika K-01 card collector	1
Hatch key lock	2
Datasheet	1
Operational manual	1
Installation guidelines	1
Anchors SORMAT PFG LB12-50*	3
Screw M12x60 DIN912(GOST 11738-84) with hexagon hole for wrench*	3
Connecting cable PVA 2x1,5*	1

*- optional

The manufacturer reserves the right to change the packaging, specifications and appearance without notice

> ATTENTION (!) Reader doesn't include in scope of supply.

3. Basic specifications

Table 2. Basic specifications

Specification	Value
Dimensions (WxHxD), mm	200x1045x200
Weight, kg	24
Temperature range,, ºC: - operation - transportation and storage	+1…+40 +1…+40
Atmosphere relative humidity, no more than %	80
Supply voltage, V: - nominal - working	12 8…18
Average current in standby mode * A	0,2
Maximal current *, A	1,5
Maximal dimensions, mm	155x40x55
Number of cards	More than 500
Lifetime, years	8

* - values mentioned at a nominal supply voltage

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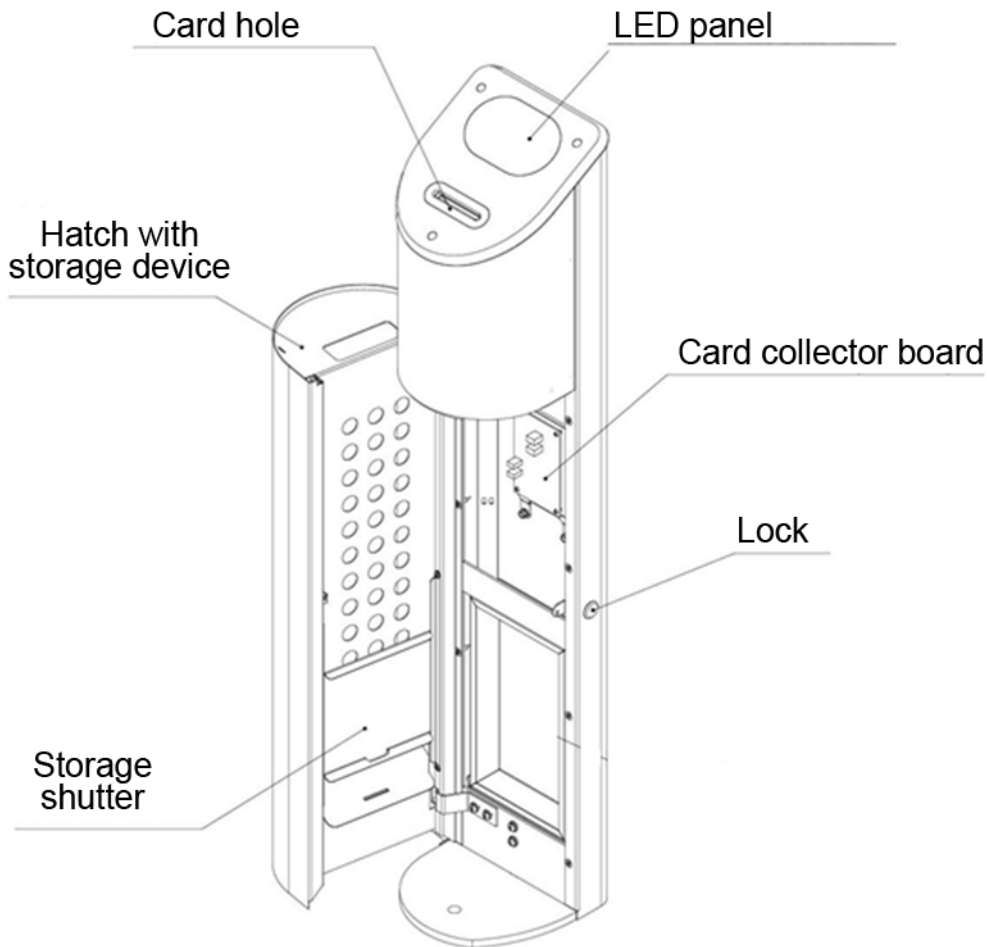
4. Product design

Fig 1. *General view of card collector*

The housing is made of brushed stainless steel. In front of the housing there is a hatch with lock for quick access to collected cards and to the board where PS, OD and ACS cables are connected. The hatch includes a card storage device. The lower part of housing is equipped with a hole for cables inlet.

ATTENTION (!) **Reader is not included in the delivery set. Customer can choose reader model suitable for the existing system.**

The reader is mounted on a universal adjustable bracket, located under the top cover of the card collector. This solution provides maximum flexibility for installation and connection of the card reader.

5. Transportation and storage

Card collector in its original packaging shall be transported by air, by road and by railroad with protection from direct exposure to rain and dust without range limitation. It is allowed to stack boxes in 3 rows during transportation and storage if Euro-pallets used. Keep the card collector in dry (no moisture condensation) heated places within +1 to + 40 °C temperature range. Avoid vapors of acids, alkalis, and corrosive gases at the storage place. Storage of card collector in the original package in a dry unheated premises or closed transport containers is permitted for short periods, no more than 3 days. Before startup, the card collector must be kept in a room with normal climate conditions for 12 hours after storage in unheated rooms.

Dimensions of container - 345x345x1095 mm (HxWxL).

6. Safety requirements

CAUTION! Failure to comply with the safety requirements specified in this section may result in damage to human life and health, total or partial loss of workability of products and (or) auxiliary equipment.

CAUTION! Installation of the card collector shall be performed by qualified personnel according to the instructions.

CAUTION! The producer disclaims any liability for damage to human life and health, total or partial loss of workability of products and (or) auxiliary equipment for non-compliance of the safety requirements specified in this section, as well as terminate the product warranty.

IT IS NO ALLOWED TO:

- Set the power supply unit inside the housing of the card collector, as this could lead to electric shock to persons;
- Set the card collector other than in dry and heated places;
- Impede or accelerate the curtain of card reader;
- Apply chemically aggressive cleaning detergents (as pastes and liquids) to the materials of the housing.

7. Operation of card collector

7.1. Startup

Connect the power supply unit to network 220V and turn it on. Card collector will beep and red cross will turn on LED panel (Fig. 1). Card collector is ready for operation.

7.2. Working modes

Standby mode

The mode is set after power-up. In this mode, the card collector waits for a signal from ACS controller. Red cross is turned on on the display. The mode of minimal power consumption.

Passage with permanent cards

When an authorized permanent visitor card is presented to the reader card collector unlocks the speedgate for the time specified by ACS controller (depending on the operating mode; for 5 seconds in pulse mode). During the specified time interval other cards are not accepted. When the passage is performed or the specified time interval is expired card collector switches into standby mode and can collect the next card. Green arrow turns on on the LED panel, indicating the authorization of the passage.

Passage with guest cards

Guest card shall be inserted into the card hole up to the stop otherwise it will be ignored. In case the presented card is authorized, the card collector collects it and then unlocks OD for 5 seconds.

Storage device is full

When the storage device is overfilled, the card collector stops collecting guest cards and provides four short audio signals at intervals of 4 sec., the LED panel flashes red cross indicator at an interval of 4 seconds. Audio signal lasts for 3 minutes; then red cross on LED display continues single blinks 1 time in 2 sec. Passages with permanent cards are performed normally. In order to switch the card collector in the standard operating mode, remove cards from the storage device (see. Article 7.3).

Emergency mode

During the operation of the card collector there might be a situation when a card or a foreign object becomes jammed by shutter of the card collector. To resolve such situations is an emergency mode.

- Open the hatch of the card collector using the key (Fig. 1);
- Press and hold BUT1 button on the board of the card collector (Fig. 2). When the button is pressed shutter is open forcedly and a continuous audio signal is performed;
- Remove the object that impedes the normal operation of the system;
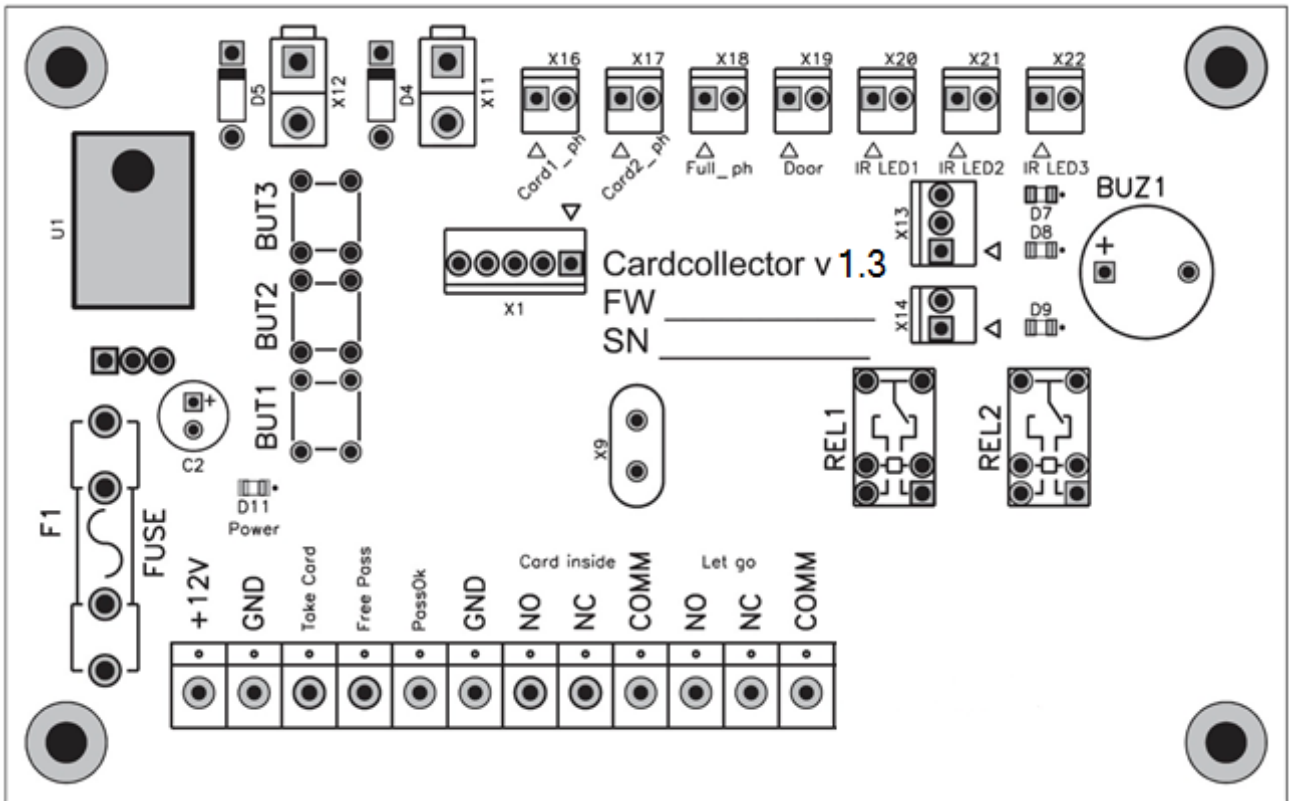- Release BUT1 button and close the hatch with a key

Fig. 2. Layout of board

7.3. Removing guest cards from card reader

7.3.1. Open the hatch lock of card collector with a key (Fig. 1).

7.3.2. Put a bag to collect cards (not supplied) underneath storage device.

7.3.3. Gently lift the storage curtains to remove the cards.

7.3.4. Lower the storage curtains and close the door with a key.

7.4. Inversion of LED panel board

In some cases, for correct display modes of the card reader, you need to invert the board indicating by 180º depending on the installation site. Inversion is made according to the Installation guidelines (section 6).
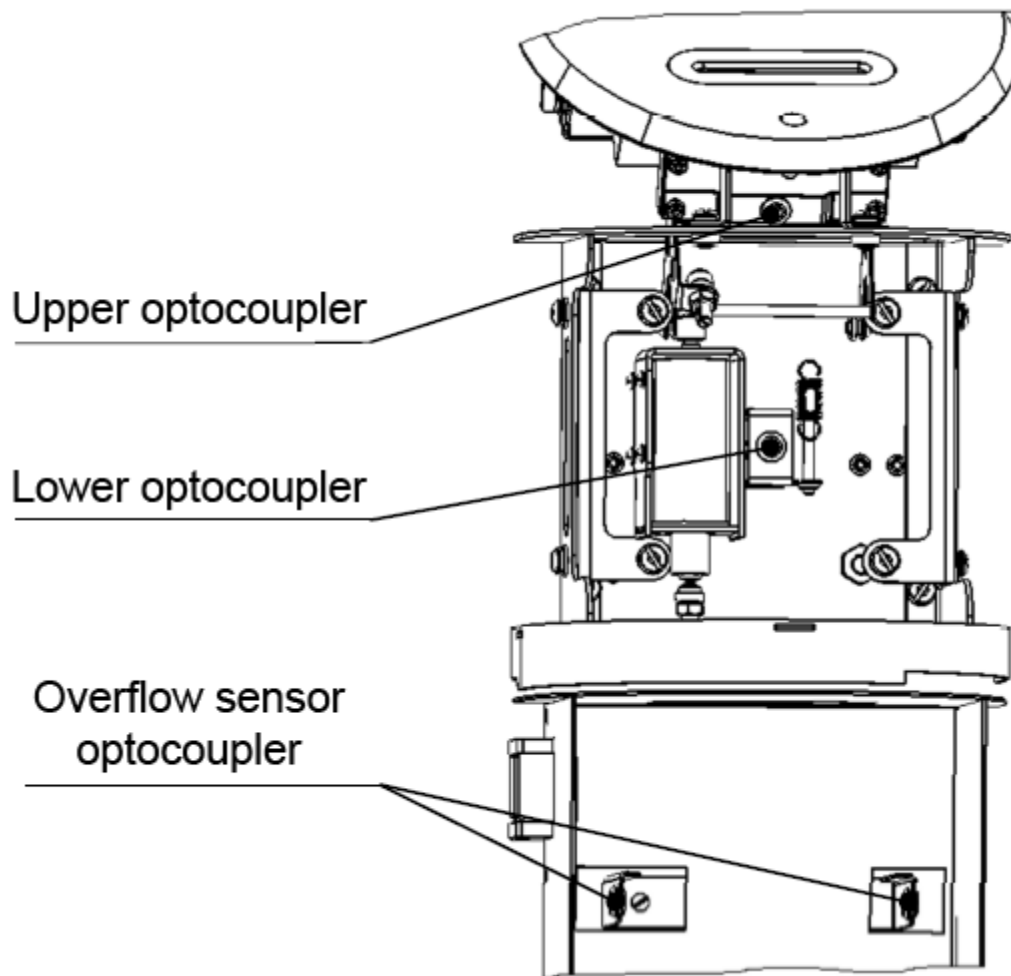
Appendix 1. Typical faults

Fig 3. Location of optocouplers of card collector

Table 1. Troubleshooting

Fault	Possible causes	Actions
PS unit is connected, but the card collector does not work		Check the connection cable; Check the fuse on board the card reader;
Card collector provides 4 audio signals at intervals of 3 sec, red cross on the LED panel flashes every 4 seconds (audio signals last for 3 minutes; then red cross on the LED display continues single blinks 1 time in 2 sec.)	Storage device is full	Act in accordance with Section 7.3;
	Overflow sensor (*optocoupler*) is broken (Fig. 3)	Check the condition of the cables and connectors; If D9 LED on the board of the card collector does not turn red – the fault is caused by the malfunction of motherboard; If D9 LED on the board of the card collector turns red: set the jumper on Full_ph connector - if LED D9 then goes off, the alarm stops, the Red Cross does not blink – the fault is caused by defective optocoupler; Check the voltage at the connectors (**without removing the connectors, while holding down BUT1 button**): 1. Full_ph (Vtyp = 0,15 B; Vmax = 2,5 V): - If V ≤ 2,5 In - all right; - If V> 2,5 V – disaligment or LED and phototransistor fault; - If V = 5 V - the phototransistor or cable are defective;

		2. IR LED3 (Vtyp = 1,2 B): - If V = 5 V - LED or cable defective;
Card collector provides 5 audio signals, red cross on the LED panel is blinking (then red cross on the LED display continues blinking, cards are not collected, free passage mode is off).	Card or foreign object is left in card hole of card collector	Act in accordance with Section 7.2, "Emergency mode";
	Defective upper optocoupler (Fig. 3)	Check the voltage at the connectors **(without removing the connectors, while holding down the button BUT1)** 1. IR LED1 (Vtyp = 1,2 B): - If V = 5 V - LED or cable defective 2. Card1_ph (Vtyp = 0,1 B; Vmax = 2,5 V): - If V ≤ 2,5 In - all right; - If V> 2,5 V - disaligment or LED and phototransistor fault; - If V = 5 V - the phototransistor or cable are defective;
Card collector collects a guest card and provides an audio signal for 1 second	Defective lower optocoupler (Fig. 3)	Check the voltage at the connectors **(without removing the connectors, while holding down the button BUT1)** 1. IR LED2 (Vtyp = 1,2 B): - If V = 5 V - LED or cable defective 1. Card2_ph (Vtyp = 0,1 B; Vmax = 2,5 V): - If V ≤ 2,5 In - all right; - If V> 2,5 V - disaligment or LED and phototransistor fault;

		- If V = 5 V - phototransistor or cable are defective