

Proximity card reader installation guide



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NVAC-100C
NVAC-200CK

noVus®

INFORMATION


EMC (2004/108/EC) and LVD (2006/95/EC) Directives

CE Marking

 Our products are manufactured to comply with requirements of following directives and national regulations implementing the directives:


- Electromagnetic compatibility EMC 2004/108/EC.
- Low voltage LVD 2006/95/EC with further amendment. The Directive applies to electrical equipment designed for use with a voltage rating of between 50VAC and 1000VAC as well as 75VDC and 1500VDC.

WEEE Directive 2002/96/EC

 Information for users who want to get rid of electrical and electronic appliances. This product is marked according to the European Directive on Waste Electrical and Electronic Equipment (2002/96/EC) and further amendments. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The symbol on the product, or the documents accompanying the product, indicates that this appliance may not be treated as household waste. It shall be handed over to the applicable collection point for the waste electrical and electronic equipment for recycling purpose. For more information about recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

RoHS Directive 2002/95/EC

Information concerning limitation of the use of dangerous substances in the electrical and electronic appliances.

 Out of concern for human health protection and friendly environment, we assure that our products falling under RoHS Directive regulations, regarding the restriction of the use of hazardous substances in electrical and electronic equipment, have been designed and manufactured in compliance with the above mentioned regulation. Simultaneously, we claim that our products have been tested and do not contain hazardous substances whose exceeding limits could have negative impact on human health or natural environment.

Information

The device, as a part of professional CCTV system used for surveillance and control, is not designed for self installation in households by individuals without technical knowledge.

The manufacturer is not responsible for defects and damages resulted from improper or inconsistent with user's manual installation of the device in the system.

WARNINGS AND PRECAUTIONS

ATTENTION!

THE KNOWLEDGE OF THIS USER'S MANUAL IS AN INDESPENSIBLE CONDITION OF A PROPER CONTROLLER OPERATING. YOU ARE KINDLY REQUESTED TO FAMILIARIZE YOURSELF WITH THIS MANUAL BEFORE STARTING THE DEVICE. THE MANUAL SHOULD BE KEPT FOR FUTURE USE.



CAUTION!

ALL REPAIRS CAN BE EXECUTED ONLY BY QUALIFIED STAFF OF THE AUTHORISED NOVUS SERVICE.

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ATTENTION!

PRIOR TO UNDERTAKING ANY ACTION THAT IS NOT PROVISIONED FOR THE GIVEN PRODUCT IN ITS USER'S MANUAL AND OTHER DOCUMENTS DELIVERED WITH THE PRODUCT, OR THAT ARISES FROM THE NORMAL APPLICATION OF THE PRODUCT, ITS MANUFACTURER MUST BE CONTACTED OR THE RESPONSIBILITY OF THE MANUFACTURER FOR THE RESULTS OF SUCH AN ACTION SHALL BE EXCLUDED.

IMPORTANT SAFEGUARDS AND WARNINGS

1. Read, keep, and follow these instructions. All the safety and operating instructions should be read before the product is operated;
2. Follow all the safety instructions in this manual. Improper installation and controller operation may have impact on operator's safety as well as controller operational reliability and working life;
3. All the controller installations and operations should be done according to this installation guide;
4. Please unplug the unit from the power before starting maintenance procedures.
5. You mustn't use attachments / accessories that are not specified by the manufacturer.
6. Mounting the device in places where proper ventilation cannot be provided (e. g. closed lockers etc.) is not recommended since it may lead to heat build-up and damaging the device itself in consequence.
7. Mounting the device on unstable surface or using not recommended mounts is forbidden. Improperly mounted device may be the cause of fatal accident or be seriously damaged itself. Device must be mounted by qualified personnel with proper authorization, in accordance to user's manual.
8. Device should be supplied only from power sources which parameters are in accordance to one's pointed out by the producer in controller technical datasheet. Therefore it is forbidden to supply the controller from power sources with their parameters unknown, unstable or not meeting the producer's requirements.
9. Cables to the device should be placed in a way excluding the possibility of damaging them by accident. Special attention must be paid to cables going out of the controller and connecting power supply;

WARNINGS AND PRECAUTIONS

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10. In order to prevent the unit from damage signal wires should be equipped with appropriate surge protection device conforming to European Union standards. We also advice utilizing data transmission protection.
 11. Electric installation supplying the device should be designed to meet the specifications given by the producer in such a way, that overloading it is impossible.
 12. Device should be protected from water and objects that may get inside it.
 13. User cannot repair or upgrade equipment himself. All maintenance actions and repairs should be done only by the qualified service personnel.
 14. Unplug the device from the power source immediately and contact the proper maintenance department when the following occurs:
 - ◆ Damages to the power cord or to the plug itself;
 - ◆ Liquids getting inside the device or exposure to strong mechanical shock;
 - ◆ Device behaves in a way not described in the manual and all adjustments approved by the manufacturer, and possible to apply by user himself, seem not to have any effect;
 - ◆ Housing is damaged;
 - ◆ Atypical behaviour of the controller components may be seen (heard).
 16. In case of repairs please pay attention to using only original replacement parts (with their parameters in accordance to those specified by the producer) should be paid. Non-licensed service and non-genuine replacement parts may cause fire or electrocution.
 17. After maintenance activities tests should be run to ensure proper work of all the device's functional components.

INFORMATION

Data included in the following user's manual is up to date at the time of printing. Novus Security Sp z o.o. holds exclusive rights to modify this manual. The producer reserves the rights for device specification modification and change in the design without prior notice.

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FOREWORD INFORMATION

1. Foreword information

Proximity card readers NVAC-100/200 are hi-tech devices designed as elements of access control systems. Depending on the version the reader can work with 125 kHz cards (Unique and HID standard) or 13,56 MHz cards (Mifare, Philips and HID iClass 2k). The NVAC-200 device is also equipped with numeric keyboard which enables increasing security level (card + code).

The NVAC-100 and NVAC-200 devices have Wiegand's output in the following formats:

- 26 bits signal for Unique cards
- 26 to 37 bits signal for HID standard cards
- 32/34 bits signal for Mifare or iClass cards

Numeric keyboard operates in 8 bits mode (the device generates 8 bits signal without buffering after each digit). These functions enable direct connection to NVAC-C300CKF controller or to other controllers equipped with the Wiegand's standard port.

2. Parameters

Reading range	5 - 10 cm
Communication ports	Wieganda (26 - 37 bits, depending on card's type)
Power supply	12VDC, max .300mA
Compatible card's formats	Mifare, iClass HID (ver. H - 13,56 MHz) Unique, HID standard (ver L - 125 kHz)
Operating environment	Indoor only
Housing	ABS
Housing colour	Black
Operating temperature	0 - 50 °C
Indicators	2 LEDs, buzzer
Dimension W x SZ x G:	127 x 65 x 25 mm

SPECIFICATION

3. Specification

CPU:	8bit RISC Micro Processor
Memory:	Program memory - 16,4 Kb
Communication:	Wiegand 26/34 bits
Indicators:	3 LEDs and buzzer
Power supply:	12VDC max. 300mA
Dimensions:	127 x 65 x 25 mm ABS housing
Operating conditions:	Temperature 0 : +50C Humidity: 10% - 90%
Housing colour:	Black

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Status

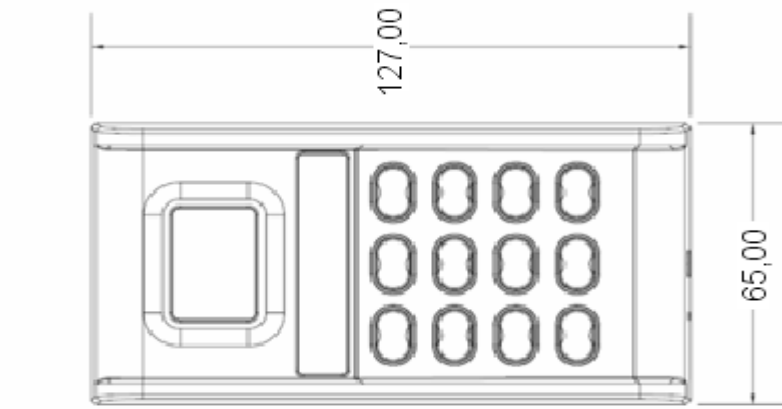
Buzzer	Controller signal input
2 LEDs	2 Controller signal inputs 2-wires control

Reader module

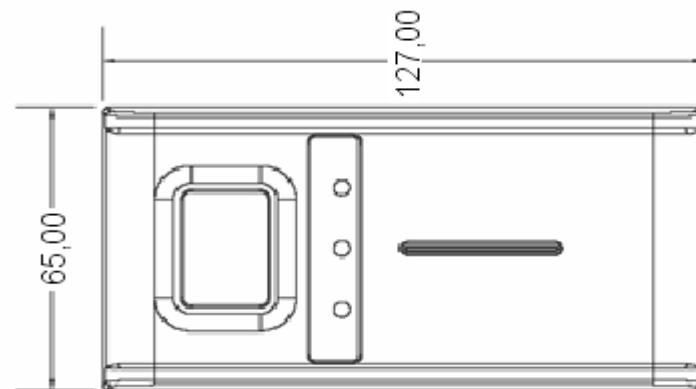
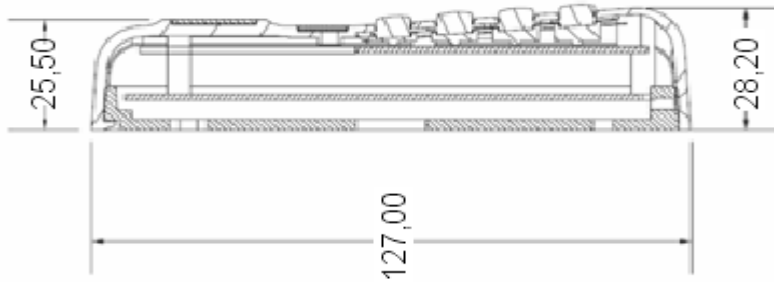
Reader type	EM / HID Mifare
Antenna type	Coil
Frequency	125 kHz / 13,56 MHz
Frequency type	A1D
Modulation type	Amplitude modulation
Antenna dimensions	45 x 55 mm

DIMENSIONS

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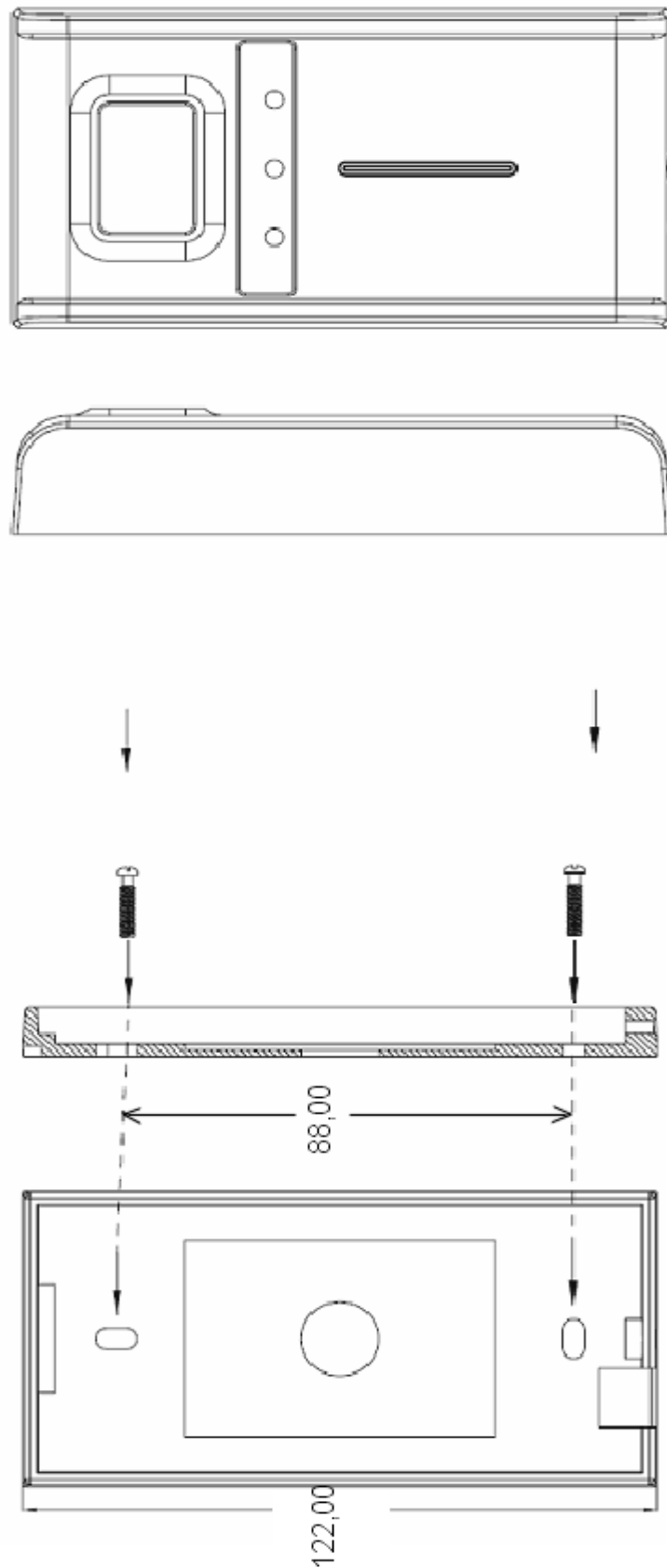
NVAC-200CK



NVAC-100C



MOUNTING



Mounting —use back lid as a pattern to mark places for mounting holes

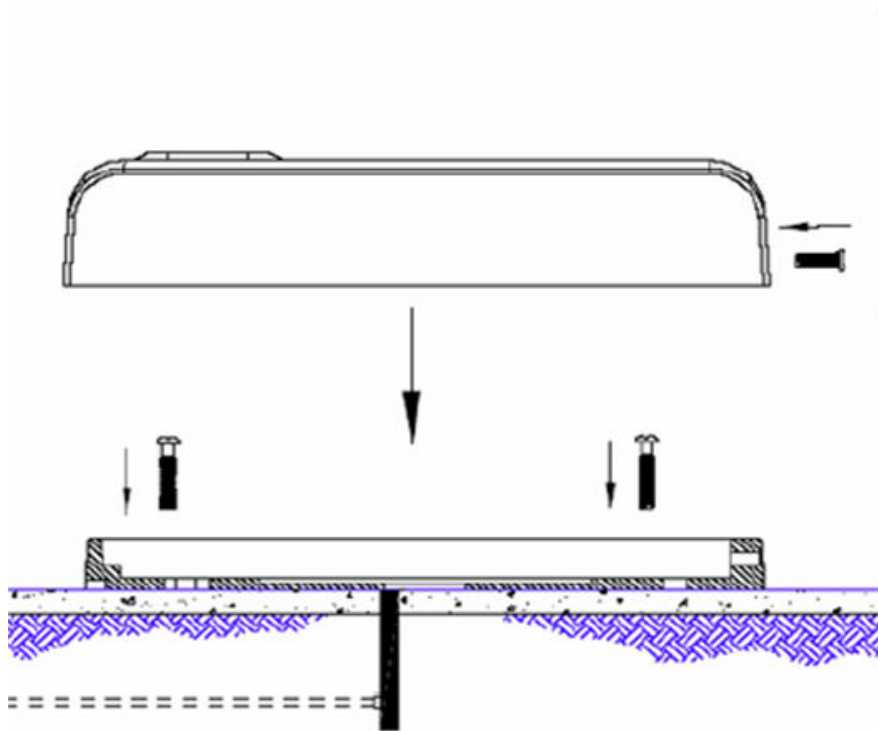
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MOUNTING

Mounting the reader on the wall:

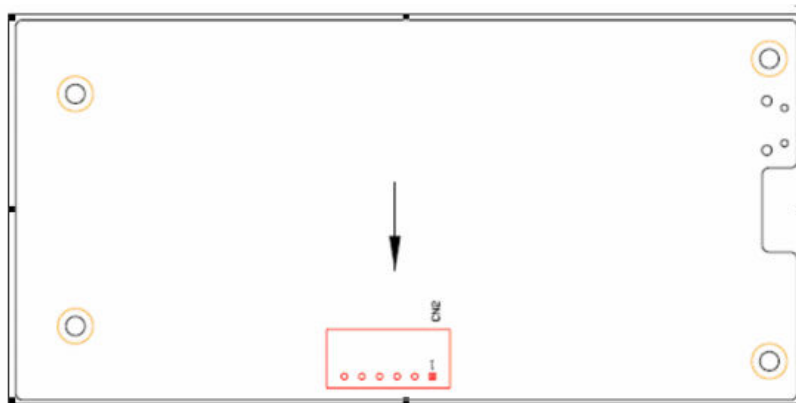
1. Drill 3 holes in the wall
 - one for 8 mm diameter cable
 - two for mounting back lid screws
2. Screw the back lid to the wall
3. Pull the wire through the central hole
4. Mount the reader on the wall and screw the bottom screw

CAUTION: 1. Mounting screws are included
2. User should mount bottom screw using hex key (included)



WIEGANDA CONNECTOR

Wieganda connector:
Pin 7: Buzzer control (yellow)
Pin 6: Red LED control (grey)
Pin 5: Green LED control (blue)
Pin 4: DATA 1 (green)
Pin 3: DATA 0 (white)
Pin 2: GND (black)
Pin 1: Vcc (red)



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