Appendix A

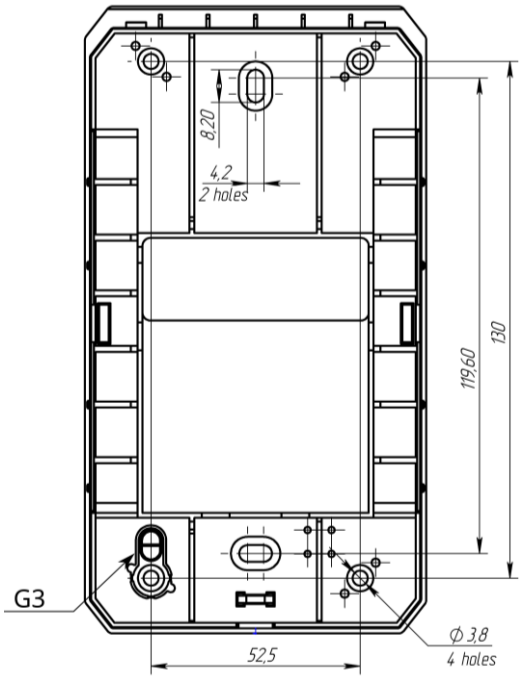


Figure A.1 – Installation sizes of the keypad

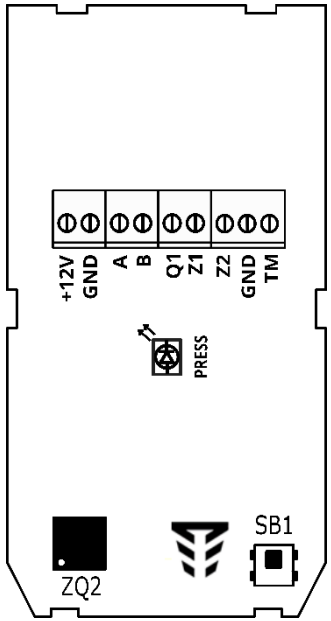
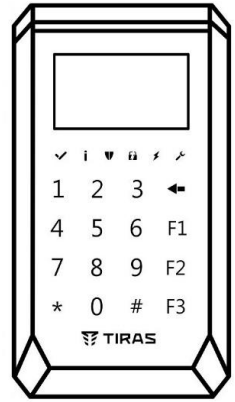


Figure A.2 – Appearance of keypad board elements

For notes:

For notes:

TIRAS technologies



K-PAD OLED
K-PAD OLED+

Keypads

User manual

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More information on the site
tiras.technology

Edition: 18.10.24

1 GENERAL INFORMATION

K-PAD OLED/OLED+ are keypads designed to control the burglar alarm system (arming, disarming, control of automation, etc.) and review its state. The K-PAD OLED/OLED+ keypads are compatible with Orion NOVA S (LTE), Orion NOVA M (LTE), Orion NOVA L (LTE) security control panels (further – SCP). To control the alarm system, there are touch keys on the front panel, which are illuminated together with the display when activating touch. K-PAD OLED/OLED+ keypads are equipped with a display and LED indicators that display the status of the system (arming, faults, alarms). K-PAD OLED/OLED+ have terminals for connecting two zones and transistor output that can operate in open collector or remote LED mode. The K-PAD OLED keypad supports connection of Touch Memory key readers.

The K-PAD OLED+ keypad is provided with a built-in contactless reader allowing to use NFC tags (cards and key fobs) operating at 13.56 MHz as a user access ID. Identifiers meeting ISO14443A, ISO14443B (MIFARE Classic, MIFARE Ultralight, etc.) are supported. The contactless reader is located at the bottom of the keypad under the logo.

The keypad is intended for 24h work in premises with regulated climatic conditions without the direct influence of climatic factors of the environment.

2 SPECIFICATIONS

The specifications of the keypads are shown in Table 2.1.

Table 2.1 – Specifications

Parameter	Value
Sensor Type	Capacitive
Display Type	OLED
Supply voltage, V	9.3 – 15.2
Max. current consumption, mA,	120
Number of zones	2
Number of transistor outputs	1
Max. current switched by transistor output, mA	50
Radiofrequency band of the NFC reader, MHz[1]	13.553 – 13.567
Magnetic field strength measured at a distance of 10 m., dBmkA/m, not more[1]	42
Overall dimensions without stand legs (L×W×H), mm	88×160×19
Overall dimensions with stand legs (L×W×H), mm	88×160×26
Weight, g	150
Operating temperature range at relative humidity up to 75% without condensation	from –10°C to +40°C
Average service life, years	10
Average meantime to failure, hours, not less then	20 000

Note 1. For the K-PAD OLED+ keypad only.

3 INSATALLATION AND PREPARATION FOR WORK

3.1 Mounting

Before mounting the keypad, you should first open its case to access the mounting holes from the inside. To open the case, unscrew the screw at the bottom of the case (not completely) and pull the screw on itself (holding the base of the case with your fingers through the hole inside). The keypad is designed for wall mounting. At the base of the case, there are six holes for mounting on the wall (Figure A.1, Appendix A). The G3-based case element is used for tamper detection and separation from the wall. It should be fixed with a screw to the wall. When the base of the case is separated from the wall, the element G3 remains on the wall, leading to the tamper break. The maximum permissible deviation of the mounting points should not exceed 1 mm.

3.2 Connections

Caution:

1. All connections must be carried out by qualified personnel in accordance with the electrotechnical regulations and fire safety regulations.
2. Installation and connections must be carried out with the power supply disconnected.
3. The stranded wires must be crimped by tips.
4. Printed circuit board of keypad contains static-sensitive components. To avoid damage to sensitive components before handling any boards, you should discharge static electricity in your body by touching the ground.

Enter the wires via appropriate holes of keypad case and make all connections in accordance with SCP Installation manual. Make sure that the wires are securely fixed in the keypad terminals. After installation and connection, close the keypad case.

The appearance and description of the elements of the keypad board are shown in Figure A.2 (Appendix A) and Table 3.1.

Table 3.1 – Description of board elements

+12V, GND	Terminals for power connection keypads
A, B	RS-485 interface connection
Q1	Transistor output
Z1, Z2, GND	Terminals for connection of zones (end-of-line resistors 3 kOhm)
TM[1]	Terminal for the Touch Memory reader connection
ZQ2	Buzzer
SB1	Tamper button
PRESS	Touch button pressing the trigger

Note 1. The K-PAD OLED+ keypad does not have this terminal.

Warning! For the correct operation of the touch key of the keypad when it is turned on, there should be no foreign objects on the touch field and the keypad case should be closed. After installing the keypad, the protective film should be removed from the front panel before turning it on.

3.3. Assigning

Each keypad has a unique nine-digit serial number. This number is used to assign the keypad to the SCP using the oLoader II software. The serial number of the keypad is specified on its printed circuit board and duplicated on the keypad case.

4 OPERATION WITH THE KEYPAD

Operation with the keypad is carried out in accordance with the SCP User manual.

The keypad has a built-in buzzer (Figure A.2, Appendix A), which beeps when you press the keys and execute commands with beeps.

5 PACKAGE CONTENTS

After unpacking, visually inspect the keypad to make sure it has no mechanical damage, check the completeness according to Table 5.1.

Table 5.1 – Package contents of the keypad

Name	Quantity, (pcs.)
Keypad K-PAD OLED	1
Keypad K-PAD OLED+	
User manual	1
Stand leg	4

ATTENTION! The characteristics and package contents of the keypad may be changed by the manufacturer without additional notification.

6 REGULATORY COMPLIANCE

Hereby, "Tiras-12" LTD declares that the radio equipment model K-PAD OLED+ is in accordance with Directive 2014/53/EU.

The K-PAD OLED+ keypad is designed so that it can be operated as intended in the EU countries, without violating the applicable requirements for the use of the radio spectrum.

The K-PAD OLED/OLED+ keypads have no restrictions on commissioning in EU countries and do not require obtaining a permit for use.

The model K-PAD OLED is in accordance with Directive EMC 2014/30/EU.

The K-PAD OLED/OLED+ keypads comply with RoHS Directive 2011/65/EU.

The full text of the EU declaration of conformity is available at the following internet address: tiras.technology.

In accordance with the EU Directive 2012/19/EU on waste electrical and electronic equipment, the keypads should be disposed separately from household waste. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points.

7 WARRANTY OBLIGATIONS AND REPAIR INFORMATION

The manufacturer guarantees compliance of the keypad with the declared characteristics during the warranty period of operation and under the conditions of transportation, operation, and storage.

The warranty period is 36 months and is valid from the date of sale specified below or in other accompanying documents (contract, invoice, etc.). If you do not provide a document confirming the date of sale of the keypad, the warranty period is calculated from the date of manufacture of the keypad.

_____ _____ _____

(date of sale) (seller's signature) seller's stamp

The keypad is repaired by the manufacturer or its authorized representative. The keypad is repaired for free in case the warranty period is not expired, and it was operated in accordance with the accompanying documentation. For repairs, the keypad is sent together with the document, which indicates the date of sale, and with a letter stating: the nature of the fault, the place of operation, contact person for repair.

If the keypad is not working properly, please contact technical support first, perhaps this problem can be resolved remotely.

The date of manufacture of the keypad and/or its serial number are indicated on the keypad label and packaging.

Information limitation of liability is posted in the "Warranty" section on the website: tiras.technology.

8 CONTACTS OF THE MANUFACTURER

"Tiras-12" LTD, Ukraine, Vinnytsia, Khmelnytskoho Shose lane 2, b. 8

Sales department: market@tiras.ua

Technical support: support@tiras.ua

Warranty and post-warranty service: otk@tiras.ua