



[oLoader II
\(Android\)](#)



[oLoader II
\(iOS\)](#)



[oLoader II
\(Windows/MacOS\)](#)



[Control NOVA II
\(Android\)](#)



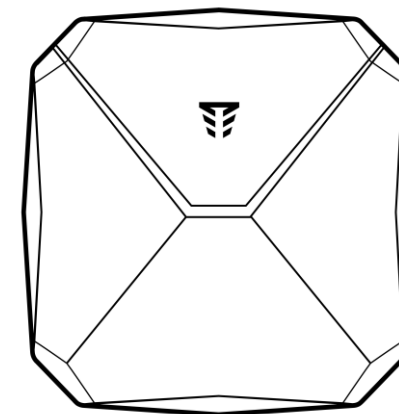
[Control NOVA II
\(iOS\)](#)

Table A.1 – Technical specifications

Parameter	Value
Maximum number of wireless detectors	64 ¹
Maximum number of wireless key fobs for the system control	32 ¹
Maximum numbers of wireless keypads	4 ¹
Maximum number of wireless sirens	4 ¹
Maximum number of repeaters	4 ¹
Maximum SRD transmitter power, mW	25
Maximum bandwidth, kHz	100
Maximum deviation of the channel frequency, kHz	6
Maximum number of groups in the system	16
Maximum number of users in the system	32
Communication protocol with ARC	“NOVA”, “Sur-Gard” (Contact ID)
Radio technology, max RF output power	EGSM900 (max RF output power 33 dBm ± 2 dB): (TX:880.1–915.0) / (RX:925.1–960.0) MHz, DCS1800 (max RF output power 30 dBm ± 2 dB): (TX:1710.0–1785.0) / (RX:1805.0–1880.0) MHz, LTE-FDD (max RF output power 23 dBm ± 2 dB): B20 (TX:832–862) / (RX:791–821) MHz, B8 (TX:880–915) / (RX:925–960) MHz, B7 (TX:2500–2570) / (RX:2620–2690) MHz, B3 (TX:1710–1785) / (RX:1805–1880) MHz, B1 (TX:1920–1980) / (RX:2110–2170) MHz, Wi-Fi (max RF output power 20 dBm): 2412.0 – 2484.0 MHz, SRD (max RF output power 13.98 dBm): 868.0 – 868.6 MHz
Main power source:	
▪ supply voltage (AC), V	187-253
▪ frequency, Hz	50 ± 1
Alternative power source (via USB Type-C cable):	
▪ voltage, V	5
▪ current, A	1.5
Maximum current consumption from main power source, mA	100
Alternative (backup) power supply (battery):	
▪ voltage, V	3.7
▪ capacity, mA·h	2600
The operation time from a fully charged battery, hours, not less than	24
Protection class	IP 30
The operating temperature range with relative humidity up to 75% without condensation	from -10°C to +40°C
Dimensions (L×W×H), mm, (± 5 mm)	170×170×34
Net weight, kg, no more than	0.4
Average service life, years, not less than ²	10

Note. 1. The maximum number of wireless components in the system, including wireless detectors, keypads, sirens, repeaters, and key fobs is 64.

2. Does not apply to the battery.



Orion NOVA X (LTE)

Wireless security control panel



“Tiras-12” LTD

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Learn more
tiras.technology

1 GENERAL INFORMATION

Orion NOVA X (LTE) is a wireless security control panel (further – SCP) intended for controlling the wireless security alarm systems with automation control functions.

Depending on the requirements of the protected object, wireless detectors, sirens, repeaters, and access identification devices are connected to the SCP.

The system is controlled from local access devices (keypads, wireless key fobs) and remotely via the Internet using the Control NOVA II software.

If the SCP is controlled only remotely (using the Control NOVA II software), there may be some periods when the remote control is not available due to smartphone battery discharge, no Internet connection, some server maintenance works, etc. Therefore, we strongly recommend designing the SCP with at least one local access device (X-Pad or X-Key).

The SCP can transmit information about the state of the system to the alarm receiving center (further – ARC), the Control NOVA II software, send SMS messages, and make a control call to specified telephone numbers.

The SCP interacts with the ARC and Tiras CLOUD II using the following communication channels: Wi-Fi and GSM/LTE (two mini-SIM cards can be installed) to provide a backup communication channel.

The SCP can be powered by the alternative power source via the USB-A – USB Type-C cable (not included in the package).

The backup power supply of the SCP is provided by a Li-ion battery with a capacity of 2600 mA·h (pre-installed).

Technical specifications are given in Table A.1 (Appendix A).

2 INSTALLATION AND SETTING

2.1 Installation

Caution:



1. Installation, removal, and all connections must be carried out by qualified personnel in accordance with the electrotechnical regulations and fire safety regulations.

2. Installation, removal, and all connections must be carried out with disconnected power supplies: main (230V) and alternative (battery).

3. The main power supply (230V AC) is connected to the built-in power supply unit by solid or stranded cable with cross-section 0.75-2.5 mm². The main power connection terminals are marked as “L” and “N”. The connection wires insulation must be stripped by 6 mm maximum. The stranded wires must be crimped by tips.

4. It is not allowed to use a cable with damaged insulation.

5. After connecting the wires to “L”, “N” terminals, fix the cable with the provided clip.

6. The mains line must be connected to an automatic disconnection device designed for a current of 6A.

7. Installation, replacement, and connection of the battery must be carried out by qualified personnel. The battery terminals must be connected properly according to their polarity.

8. To ensure the safety of the device and the declared characteristics, it is not allowed to replace the battery with another type. It is not allowed to use battery with visible damages.

9. Printed circuit board of the device contains static-sensitive components. To avoid their damage before handling any boards you should discharge static electricity in your body by touching the ground.

10. After installation and connection, close the SCP case.

The SCP should be installed according to its User manual.

The SCP should be installed in a place that is not accessible to unauthorized persons. To ensure safety, the SCP's location should be placed within the security detectors' operation area.

It is not recommended to set the SCP near the sources of powerful electromagnetic radiation, in places with high levels of radio interruptions and in metal structures.

If planned to use GSM/LTE, before installing and operating the SCP, it is required to define the location with a good GSM/LTE signal (see User manual).

The SCP is designed for wall mounting. The SCP is installed on a bracket fixed to a flat surface by screws.

2.2 SCP setting

The SCP is set by means of the oLoader II software for Windows/MacOS and iOS/Android devices. Links and QR codes for downloading are given in this short user manual. A detailed description of the SCP setting is provided in the User manual.

3 PACKAGE CONTENTS

After unpacking, visually inspect the device to make sure it has no mechanical damage, check the completeness according to Table 3.1.

Table 3.1 – Package contents

Name	Quantity, (pcs.)
SCP Orion NOVA X (LTE)	1
Bracket ¹	1
Short user manual	1
Power cord ¹	1
Dowel 6×30	3
Screw for dowel 3×30	3
Screw 2.2×6.5	1

Note. 1. Pre-installed.

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

4 REGULATORY COMPLIANCE



Hereby, “Tiras-12” LTD declares that the given product is in accordance with Directive 2014/53/EU.

This product 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.

This product has no restrictions on commissioning in EU countries and does not require obtaining a permit for use.

This product complies with RoHS Directive 2011/65/EU.

This product meets Security Grade 2 requirements according to EN 50131-3 and Environmental Class II requirements according to EN 50130-5.

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 devices should be disposed of separately from household waste. For proper recycling, return these products to your local supplier upon purchasing equivalent new equipment, or dispose of them at designated collection points.



In accordance with EU Directive 2006/66/EC, batteries (included in the products) should be disposed of separately from household waste. For proper recycling, return the batteries to your local supplier or dispose of them at designated collection points.

5 WARRANTY OBLIGATIONS AND REPAIR INFORMATION

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

The warranty period is valid for 36 months after 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 this product, the warranty period is calculated from the manufacturing date.

(date of sale)

(seller's signature)

seller's stamp

This product is repaired for free by the manufacturer or its authorized representative in case the warranty period has not expired, and it was operated in accordance with the accompanying documentation. For repairs, this product should be sent together with the document indicating the date of sale and with a letter stating the nature of the fault, the place of operation, and contact person for repair.

If this product does not work properly, please contact technical support first, perhaps this problem can be resolved remotely.

The manufacturing date of this product and/or its serial number are indicated on the product's label and package.

More information on limitation of liability is available in the "Warranty" section on the manufacturer's website:

tiras.technology.



6 CONTACTS OF THE MANUFACTURER

“Tiras-12” LTD, Khmelnytskoho Shose lane 2, building 8, Vinnytsia, 21021, Ukraine

Sales department: market@tiras.ua

Technical support: support@tiras.ua

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