SOFTWARE FOR MOBILE DEVICES AND PCs:

oLoader II (Android)

oLoader II (Windows/MacOS)

Control NOVA II (Android)

Control NOVA II (iOS)

Appendix A

Table A.1 – Technical specifications

Parameter	Value		
	Orion NOVA S (LTE)	Orion NOVA M (LTE)	Orion NOVA L (LTE)
Number of zones of the SCP / in the system (wired and wireless total), pcs:	4/64[1]	8/64[1]	8/250[1]
Number of controlled outputs of the SCP / in the system, pcs:	2/16[1]	2/32[1]	6/128[1]
Maximal number of groups in the system	16	32	128
Maximal number of users in the system	64		128
Maximal number of keypads (interface RS-485)	4	8	12
Maximal number of repeaters	4		
Maximal number of expansion modules (RS-485 interface)	-		15
Communication protocol with ARC	“NOVA”, “Sur-Gard” (Contact ID)		
Radio technology: LTE-FDD: 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 EGSM900: (TX:880–915) / (RX:925–960) MHz DCS1800: (TX:1710–1785) / (RX:1805–1880) MHz Wi-Fi[2]: 2400.0 – 2483.5 MHz SRD[2]: 868.0 – 868.6 MHz	max RF output power: LTE-FDD: 23 dBm ± 2 dB EGSM900: 33 dBm ± 2 dB DCS1800: 30 dBm ± 2 dB Wi-Fi: 20 dBm SRD: 13,98 dBm	max RF output power: LTE-FDD: 23 dBm ± 2 dB EGSM900: 33 dBm ± 2 dB DCS1800: 30 dBm ± 2 dB Wi-Fi: 20 dBm SRD: 13,98 dBm	max RF output power: LTE-FDD: 23 dBm ± 2 dB EGSM900: 33 dBm ± 2 dB DCS1800: 30 dBm ± 2 dB Wi-Fi: 20 dBm SRD: 13,98 dBm
Main power source, voltage/frequency/current	187-253 V, 50 Hz ± 1		
	0.09A	0.12A	
Backup power supply (battery), voltage/capacity	12 V, 2.2 A·h	12 V, 7 or 9 A·h	
Operation time from a fully charged battery of (without considering the consumption of detectors, sirens, additional modules, and keypads), hours, not less than:	30		
Maximal total length of communication lines with the keypads and modules (RS-485), m	1000		
Protection class	IP 30		
Operating temperature range with relative humidity up to 75% without condensation	from -10 °C to +40 °C		
Dimensions (L×W×H), mm, (± 5 mm)	200×200×57	280×280×85	
Net weight (without battery), kg	0.8	1.6	

Notes. 1. The number of zones and outputs is increased by using expansion modules and keypads.
2. The SCP’s operation on a Wi-Fi or SRD channel is possible if M-WiFi or M-X modules are installed respectively.
3. SCP Orion NOVA L (LTE) is equipped with a built-in Ethernet module.

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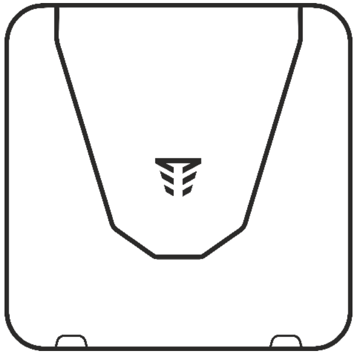

Orion NOVA S (LTE)
Orion NOVA M (LTE)
Orion NOVA L (LTE)

Security control panels

Short user manual

“TIRAS-12” LTD
Ukraine, Vinnytsia,
Khmelnytskoho Shose lane 2, b. 8

Learn more
tiras.technology

Before getting started, please read the user manual available at the link in this document and on the manufacturer's website: www.tiras.techology.

1 GENERAL INFORMATION

Orion NOVA S (LTE), Orion NOVA M (LTE), and Orion NOVA L (LTE) are security control panels (further – SCPs) intended for use in security alarm systems with automation control functions.

Depending on the requirements of the protected object, wired and/or wireless* detectors, sirens, expansion modules, repeaters and access identification devices are connected to the SCP.

The system is controlled from local access devices (keypads, Touch Memory key readers, 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 impossible due to smartphone battery discharge, no Internet connection, some server maintenance works, etc. Therefore, it is recommended to design the security system with at least one local access device (keypad or key reader).

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

The backup power supply of the SCP and the equipment connected to it is provided by a lead-acid battery with a capacity of 2.2, 7 or 9 A·h depending on the type of the SCP chosen (not supplied in the package contents).

Technical specifications are given in Appendix A.

** - available when using the appropriate modules*

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 mm^2. 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 tie.
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. The 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 the 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 install the SCP near the sources of powerful electromagnetic radiation and in places with high levels of radio interruptions.

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.

The SCP is designed for wall mounting. In the base of the case, there are holes for mounting screws (one is used to detect the separation from the wall).

2.2 SCP setting

The SCPs are set by means of the **oLoader II** software for Windows/MacOS and Android devices. Links and QR codes for downloading are given in this short user manual. A detailed description of 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	Short user manual	Resistor 3 kOhm[1]	Resistor 180 Ohm[1]	LED L-53HD[1]	Plastic plugs[1]
	Quantity, pcs				
SCP Orion NOVA S (LTE)	1	9	2	1	1
SCP Orion NOVA M (LTE)		17			
SCP Orion NOVA L (LTE)		18	4		

Note. 1. Located inside the device case.

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 they 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 3 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/EU, batteries (used 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, 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