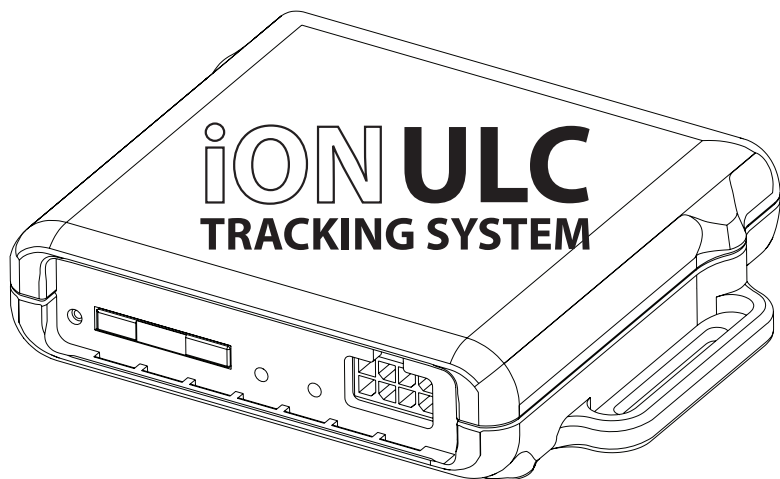


# PASSPORT

iON ULC  
Navigation User Terminal



**Manufacturer's  
Address**

iRZ Online LLC, Office 53-N, 34 Engels Av., 194156, St. Petersburg, Russia  
[www.irzonline.ru](http://www.irzonline.ru), [info@irzonline.ru](mailto:info@irzonline.ru)

# Table of Contents

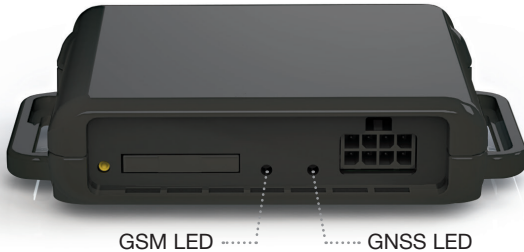
Overview .....	3
Technical Specifications .....	4
Indicators .....	5
Warranty.....	6
Information on Claims.....	7
Package Contents.....	8
Blank Page.....	9
Warranty Card .....	10

iON ULC is a navigation user terminal designed for installation in the object of observance, collection, storage and transmission of data to the server for further processing. The navigation terminal receives location and time data from the GPS/GLONASS satellites. The collected data is transmitted to the server over the GSM network using the GPRS packet-switched service. The data on the server is available to a user through the dispatching software.



# Specifications

Key features	
Navigation receiver	GPS/GLONASS uBlox MAX-M8c
Frequency bands	GSM/GPRS 900/1800 MHz
Antennas	<ul style="list-style-type: none"> <li>• built-in GPS/GLONASS antenna</li> <li>• built-in GSM antenna</li> </ul>
Flash-memory	8000 records
Built-in accelerometer	three-axis
Electrical Specifications	
Supply voltage	9 to 40V
Maximum voltage rating in a long-term mode	55V
Current consumption in various modes (at 24V power voltage), max	<ul style="list-style-type: none"> <li>• 75 mA (operating mode, the battery is charged)</li> <li>• 210 mA (operating mode, the battery is discharged)</li> <li>• 3.4 mA (6.1 mA at 12V) (sleep mode)</li> </ul>
Built-in Li-Pol battery	500 mAh
Connectors and Interfaces	
Connectors	Microfit8
Interfaces	<ul style="list-style-type: none"> <li>• analog input of 0..30V (e.g., for connection of an analog fuel level sensor)</li> <li>• discrete input</li> <li>• discrete output («open collector»)</li> </ul>
Physical Specifications	
Dimensions	93.8 x 73.6 x 20 mm
Weight	90g
Gross weight	120g
Operating temperature	-35°C to +80°C



Status Display Mode	GSM LED	GNSS LED
LED is off	Device is off	No positioning system signal available
Blinking at 100/100ms interval (100ms - on and 100ms - off)	Device loading	—
Blinking at 100/500ms interval (100ms - on and 500ms - off)	Searching a SIM card	—
Blinking at 500/500ms interval (500ms - on and 500ms - off)	Waiting for GSM registration	—
Blinking at 1500/500ms interval (1500ms - on and 500ms - off)	Registration in the GSM network is complete, waiting for connection to the server	—
LED is continuously lit	Registration in the GSM network is complete, device is connected to the server	Positioning systems signal is received
Blinking at 500/3000ms interval (500ms - on and 3000ms - off)	Device is in sleep mode	—

# Warranty

The product comes with a one-year limited warranty from date of purchase. The device storage conditions must comply with the 1st requirement of GOST 15150-69.

The warranty does not apply to batteries and components not included in the delivery package.

The manufacturing company is not liable for damage or loss of profits as a result of breakdown, incorrect installation or the equipment malfunction.

## **The warranty maintenance service does not cover the following cases:**

- if the terminal has visible marks of exposure to heat, liquids and mechanical effects;
- if there are signs of opening, damages of warranty labels and seals;
- if the device has been stored or operated under conditions not in compliance with the operating instructions;
- if the device is damaged or destroyed as a result of forces majeures or acts of third parties.

The warranty service is to be performed only by authorized repair centers. For warranty service or the product replacement, please contact the dealer from whom you purchased the product. Do not attempt to repair it yourself.

Summary of claim	Date of claim	Measures taken

# Package Contents

The delivery package of the iON ULC navigation user terminal contains the following components:

- Navigation user terminal .....1 pce.
- 8-pin interface connector .....1 pce.
- Terminal wire for the interface connector .....8 pcs.
- Passport .....1 pce.
- Installation Quick Reference Card .....1 pce.

For the detailed user guide for connection of the navigation user terminal, please refer to the «*Documentation*» section on the official website of iRZ Online:

<http://irzonline.ru/documents.html>



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# Warranty Card



## Navigation User Terminal

Serial Number:

Activation Code:

**Dealer Name**

Name and Address of Dealer:

STAMP  
HERE

\_\_\_\_\_  
(Dealer Signature)

Date: “\_\_\_\_” \_\_\_\_\_ 20 \_\_\_\_

**Customer Name**

I accept the terms and conditions stated therein:

\_\_\_\_\_  
(Customer Signature)

Date: “\_\_\_\_” \_\_\_\_\_ 20 \_\_\_\_