



GPS tracker **Voyager 4N**

Data sheet

Device identification number

1. General Information

Voyager 4N is a compact GPS tracker designed for:

- Concealed installation on vehicles;
- Ambience listening;
- Mobile object location detection;
- On-board mains rating detection;
- Writing obtained parameters to the device memory;
- Transfer of obtained parameters to the monitoring software.

2. Manufacturer

RITM Company
195248,
Energetikov avenue, building 30, block 8,
St Petersburg, Russia
Tel.: +7 911 795 02 02
www.ritm.ru/en world@ritm.ru

3. Package Contents

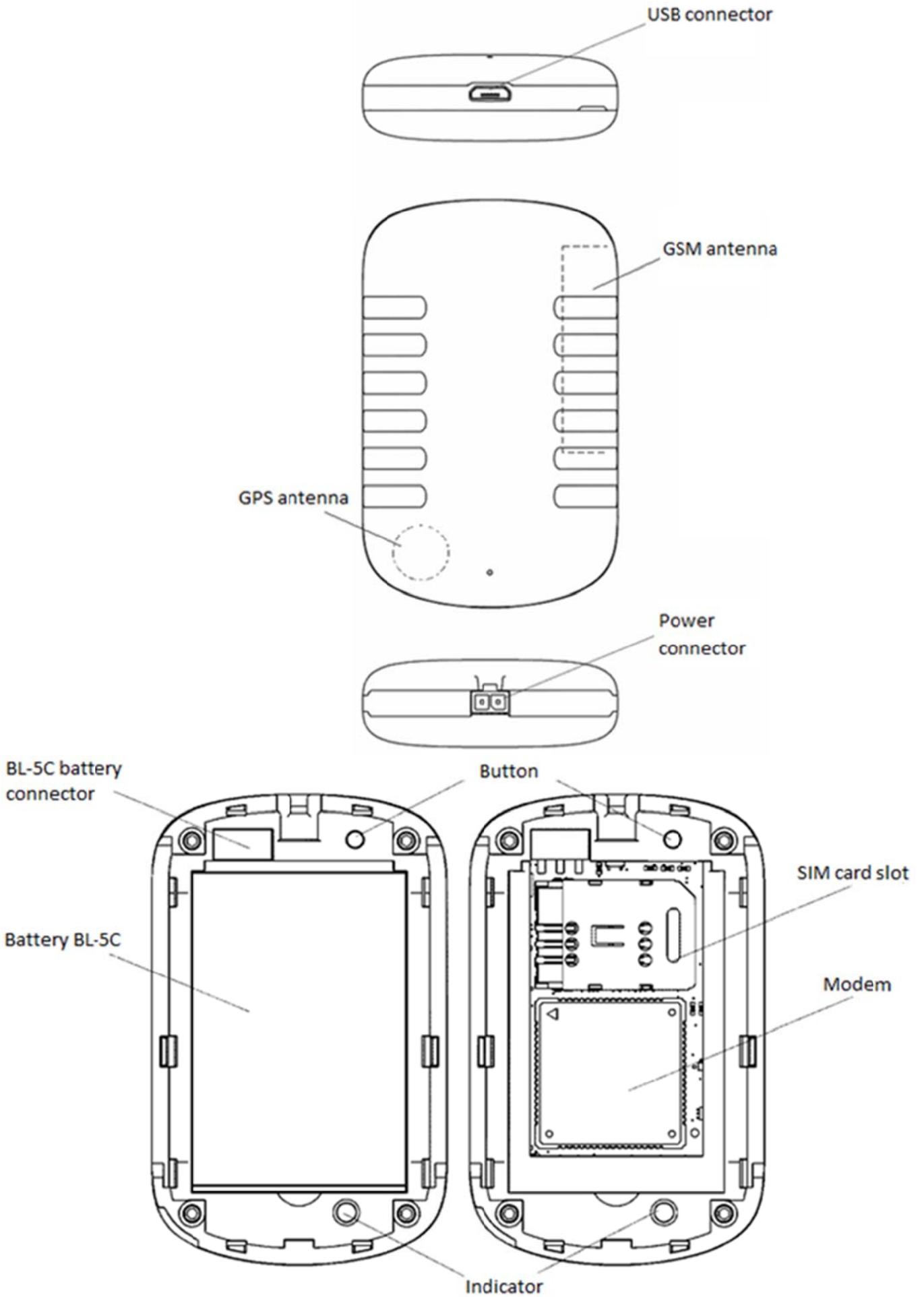
Voyager 4N GPS tracker	1 piece
Battery BL-5C	1 piece
12/24 V power cable	1 piece
Data sheet	1 piece
Package	1 piece

4. Technical Specifications

Parameter	Value
GSM	850/900/1800/1900
Communication channels in the GSM network	CSD, GPRS, SMS
Configuring via SMS	+
SMS notification service	+
Capability of charging by USB	+
Built-in motion sensor	+
Antenna type	Built-in
Built-in Flash memory, records	Up to 90,000
Main power supply from on-board mains of vehicle, V	10-36
Full charging time of battery at 12/24 V, h	5
Backup power supply	BL-5C (3.7 V, 1020 mAh)
Device energy consumption, A	0.003–0.25 (depending on mode)
Dimensions, mm	75×47×14
Weight, g	60
Operating temperature range ¹ , °C	-40...+65

¹ Without regard to battery characteristics.

5. Designation of Elements



Element	Designation
USB connector	Connection of programming cable
Power connector	Connection of 10–36 V main power supply from the vehicle's on-board mains (the red wire is the positive terminal, while the black is the negative one)
Battery connector	Connection of BL-5C battery
SIM card box	SIM card insertion
Button	Used for waking the device up from the sleep mode (turning on the GPS receiver and the GSM modem), as well as for switching on/off of the GPS receiver operation indication
Indicator	<p>The device operation indication:</p> <ul style="list-style-type: none"> • The indicator is switched on by pressing the button and operates for 30 minutes; • If satellites are not determined, the indicator blinks at the frequency 5–7 Hz; • If satellites are determined, the indicator blinks at the frequency 1 Hz; • The indicator may be turned off by pressing the button again. <p>To operate, the indicator does not require connection to the vehicle's on-board mains (works from a built-in BL-5C charged battery)</p>

6. Configuration

To configure the device, connect to it using the most suitable way:

- **Desktop configuration.** To connect use a Micro-USB cable and the configuration software ritm.conf or Ritm Configure.
- **Remote configuration via digital GSM.** To connect use a GSM CSD channel and the configuration software ritm.conf or Ritm Configure.
- **Remote configuration via TCP/IP.** Using the GEO.RITM or RITM-Link software via a TCP/IP connection, if the used device modification features this setting and works in Online mode.



To use the configuration software ritm.conf or Ritm Configure download it from the website of the "Ritm" (www.ritm.ru/en) and install all the required drivers.

To connect via a digital CSD-channel make sure there is access to the digital data transmission service (CSD) and there are enough funds on the account of the SIM-card inserted into the device.

Remote configuration via CSD is only possible from the engineering phone numbers.

7. Getting Ready for Operation

1. Configure the device prior to installation to a vehicle (hereinafter referred to as the vehicle), and enter valid APN settings.
2. Installation of the device should always be performed with the power off.
3. To install the device, choose an appropriate location, which is most protected against atmosphere effects, dirt, process fluids, physical impact, and prevents free access of unauthorized persons. Make sure the device is located at least 0.5 m from all EMI (generators, loudspeakers, etc.) sources.
4. The GPS antenna is located inside the sealed device enclosure and is not visible. Place the device so that its battery is looking down, as in this position the antenna is oriented upwards providing for the maximum received signal strength. We do not recommend to place the antenna in locations that inhibit satellite signals due to metal parts of the vehicle.
5. Prior to inserting a SIM card into the device, insert it into a mobile phone. Turn off the PIN code entry feature, check availability of data links that are to be used (CSD, GPRS), and check if the account balance is positive.
6. Open the cover on the device enclosure and insert the SIM card into the SIM card box.
7. Check the connection with the satellites (see the parts designation table in Section 5)
8. Insert the BL-5C battery into the device.
9. Close the battery compartment cover.
10. Connect the 12/24 V main power cable to the vehicle mains. Connection points of the device main power supply to the vehicle's on-board system should be selected so as to provide device power supply when the ignition is switched off and the ground connection is de-energized (if necessary, directly from the vehicle battery). The connection should be done using a cable with the minimum cross-section of 0.75 mm^2 . The power supply circuit should be protected with a 3 A fuse.
11. Install the device.

8. Maintenance and Safety Measures

At least once per month check SIM card accounts for funds.

All setup and maintenance activities applied to the device should be performed by duly qualified personnel.

9. Transportation and Storage

The device should be transported in packaging in closed vehicles. Storage premises should be free of current-conducting dust, acid and alkaline fumes, corrosive gases and gases harmful to insulation

10. Manufacturer's Warranties

The manufacturer guarantees that the device complies to requirements of the technical specifications, provided the client ensures compliances to conditions of transportation, storage, installation and operation.

Developer and manufacturer guarantees full operation of the device only with the monitoring software GEO.RITM. Not guaranteed to work with other monitoring services (the device works "as is").

Warranty repairs of the device are done throughout the life cycle. The manufacturer's warranty does not cover the battery.

The device life cycle is 6 years (provided the operating conditions are observed).

The manufacturer shall not be responsible for quality of data links provided by GSM operators and Internet service providers.

The manufacturer reserves the right for modification of the device in any way that does not degrade its functional characteristics without prior notice.

11. Information on Claims

In case of a device failure or defect during the warranty period, please fill in a malfunction report specifying the dates of issue and commissioning of the device and nature of the defect and submit it to the manufacturer.

For notes