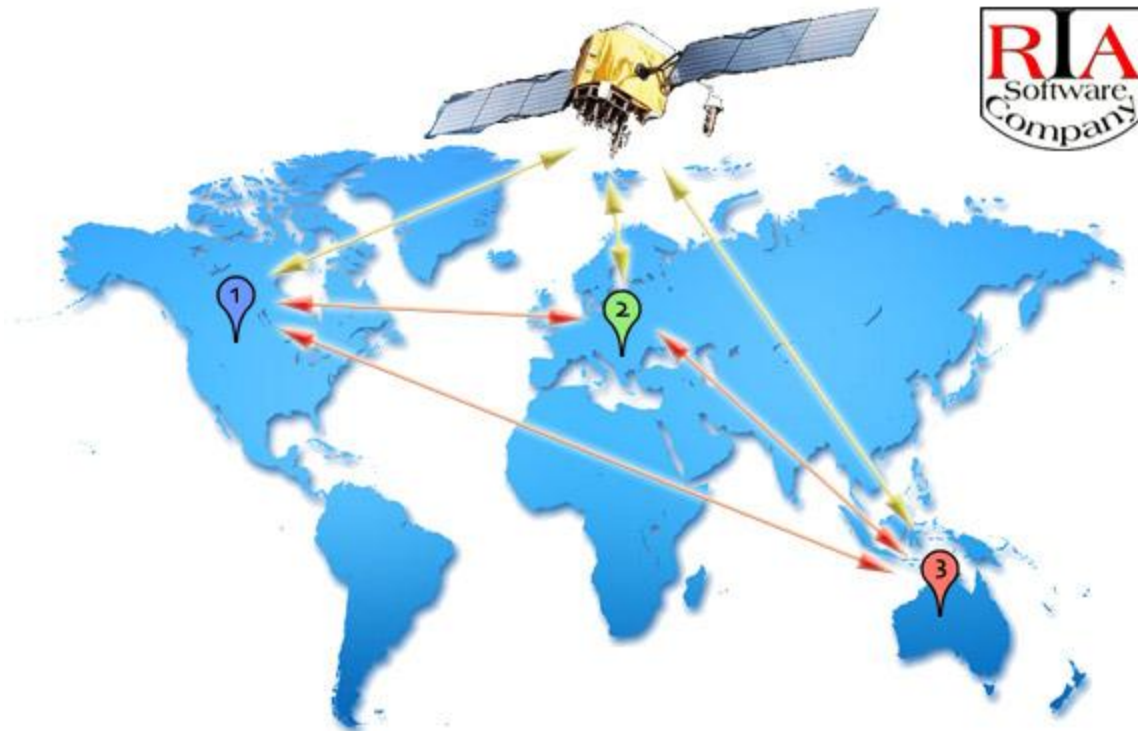


2011



**PUBLIC GEO POSITIONING**

## **PUBLIC GP SERVICE**

[www.riasc.net](http://www.riasc.net)

[info@riasc.net](mailto:info@riasc.net)

Contact:

+381 63 61 69 64 – Dejan Rajic

GPS is a global navigation satellite system. One of the most common use is to monitor people and vehicles.

All you need is:

- GPS Tracker
- GSM SIM card
- Public GP software
- Server for tracking (optional)

## GPS Tracker

Using a GPS tracker to determine the current position, speed, altitude and direction of movement. This device sends data to the server in a pre-defined intervals, and the server saves that data in the database.

User can access server at any time by using PC or mobile phone (which must have an internet connection). Logging is done by entering a user name and password. The user can monitor real-time movement of their vehicles (or peoples) in different types of maps, or specify the period and review the previous motion, speed, distance and so on.

Depending on the type of device (Personal / Vehicle / Mobile phone), there are also different types of data, or the possibility of sending a variety of status and alarms.

## GSM SIM card

Unlike other providers, we allow you the choice of mobile phone operators, because we think that you should choose the package that best suits you. What you should know in advance is that the monthly flow data is typically not more than 10-15MB. Be cautious about international travel, because the device will be roaming, which means that you will get increased phone bill.

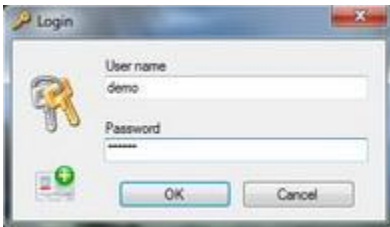
## Public GP software

### PC version

PC version can be downloaded from this link:

[http://gps.riasc.net/files/PublicGP\\_v1.0.zip](http://gps.riasc.net/files/PublicGP_v1.0.zip).

After installation finish, when you start program, login screen will appear.



Type the user name and password. If you are not registered, click on the button with the contact (+), you will be forwarded to the website for registration.

**Important:** All images in this document are reduced to 60% of the original.

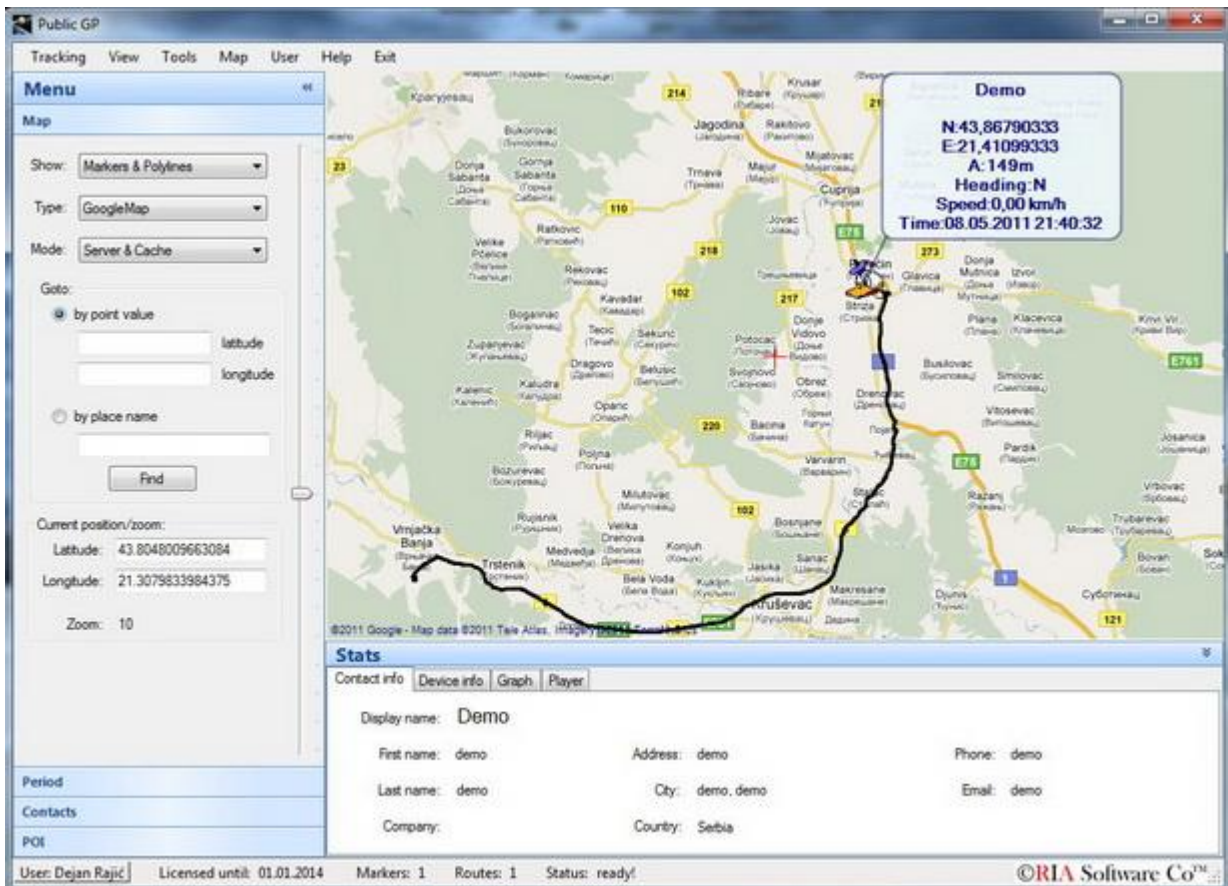
After successful login, it opens the main form.

It consists of:

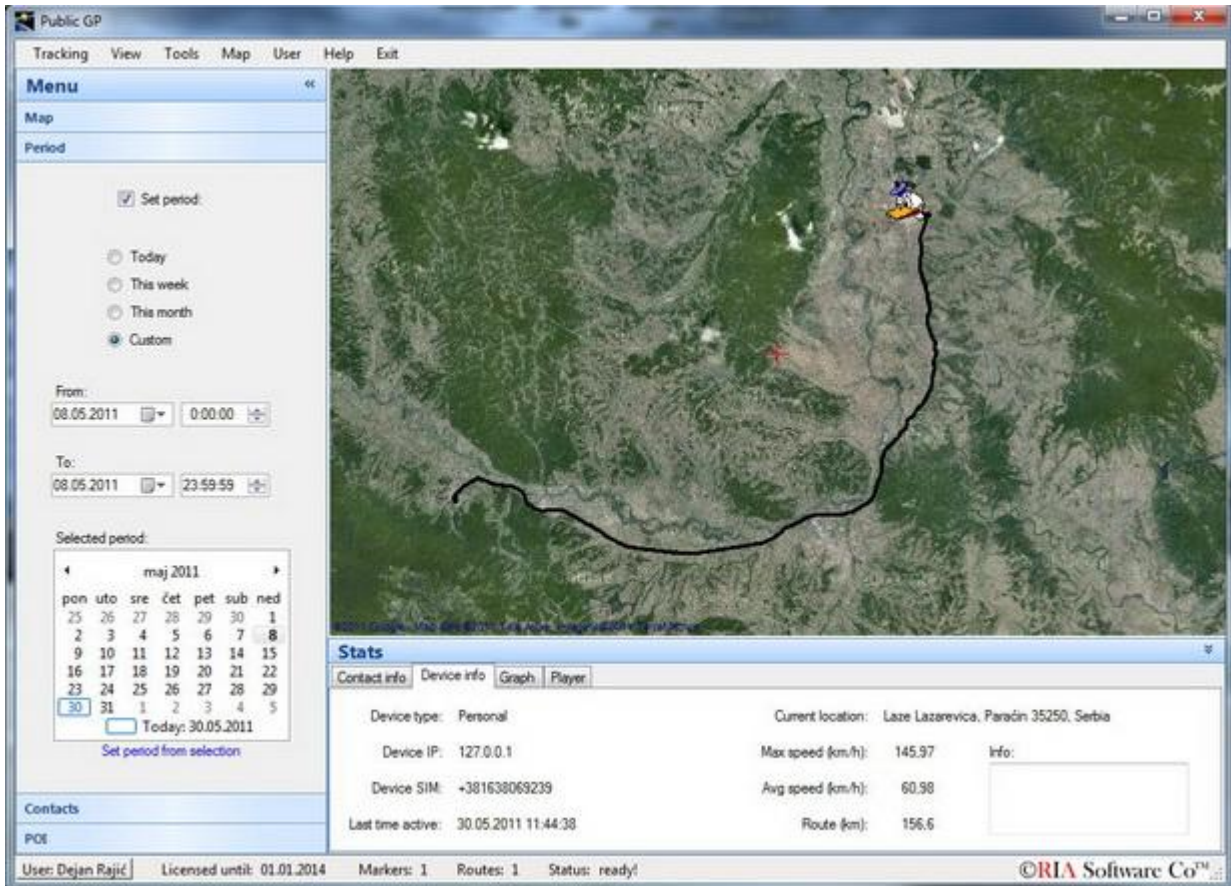
1. The main menu at the top, and will provide you with the opportunity to start the server, locate the devices manually, re-configure the main form, do the setup program, etc.

2. Extra menu on the left hand, which is divided into four sections:

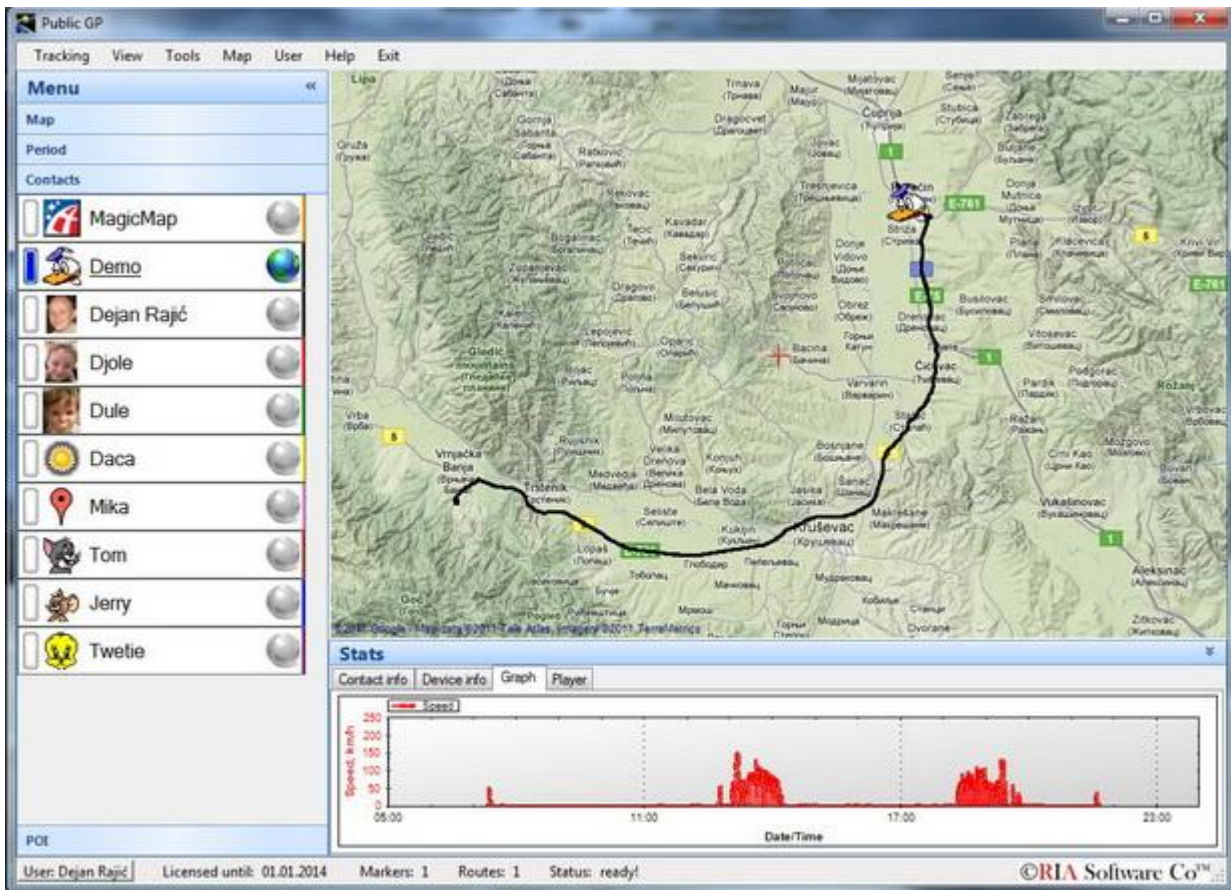
a) MAP - allows you to select the display position on the map: as a marker, line or combined (which is the default), select the type of maps (Google, Bing, Yahoo, OpenStreet, Near, Ovi, etc..), and search the map (by position, or name of the place).



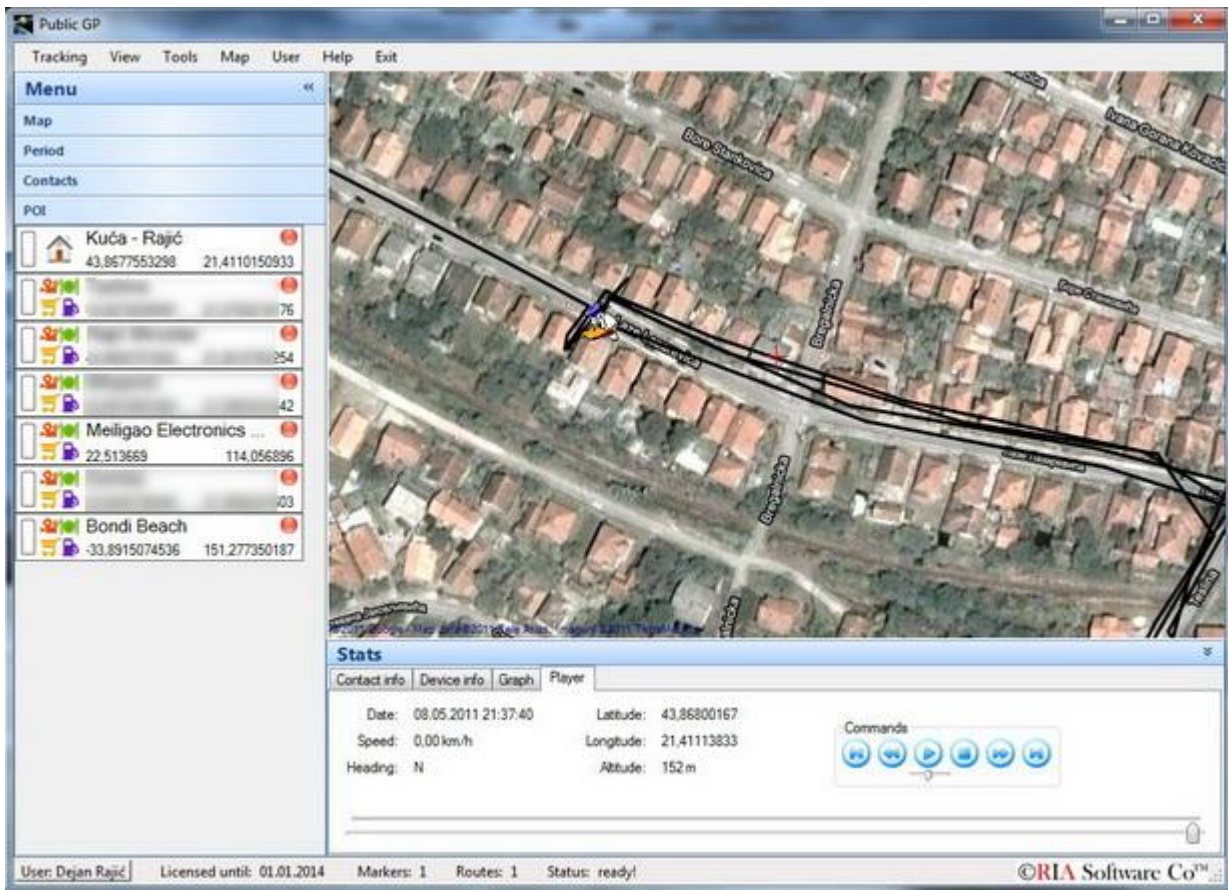
b) Period - where you make the selection period for which you seek location. You have a choice of pre-configured period: Today / This week / This month, as well as setting specific dates for the from / to, with exact date and time.



c) Contacts – where you lists all contacts (devices), with the possibility of selecting, a small thumbnail, title, and the icon that indicates whether the contact was active in the past 12 hours. Also, on the right side of each contact there is a color of its trajectory (color rendering of movement on the map).

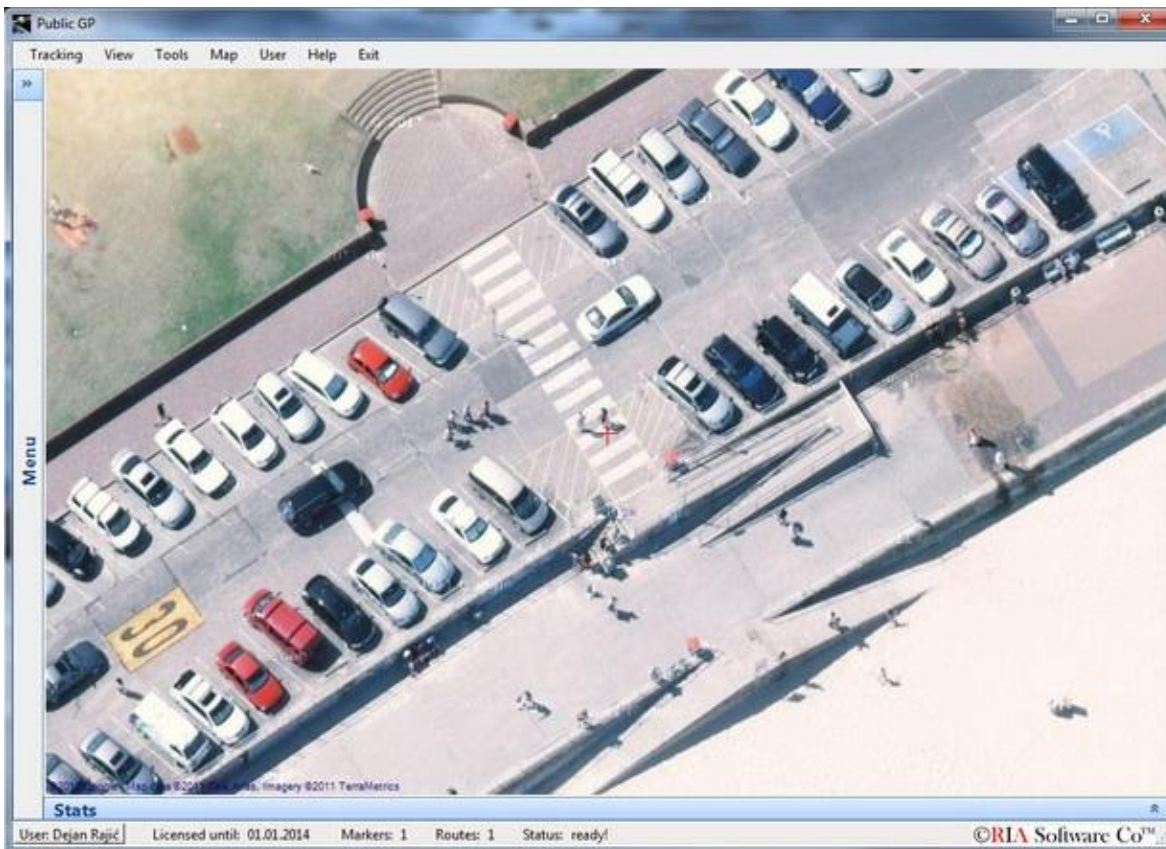
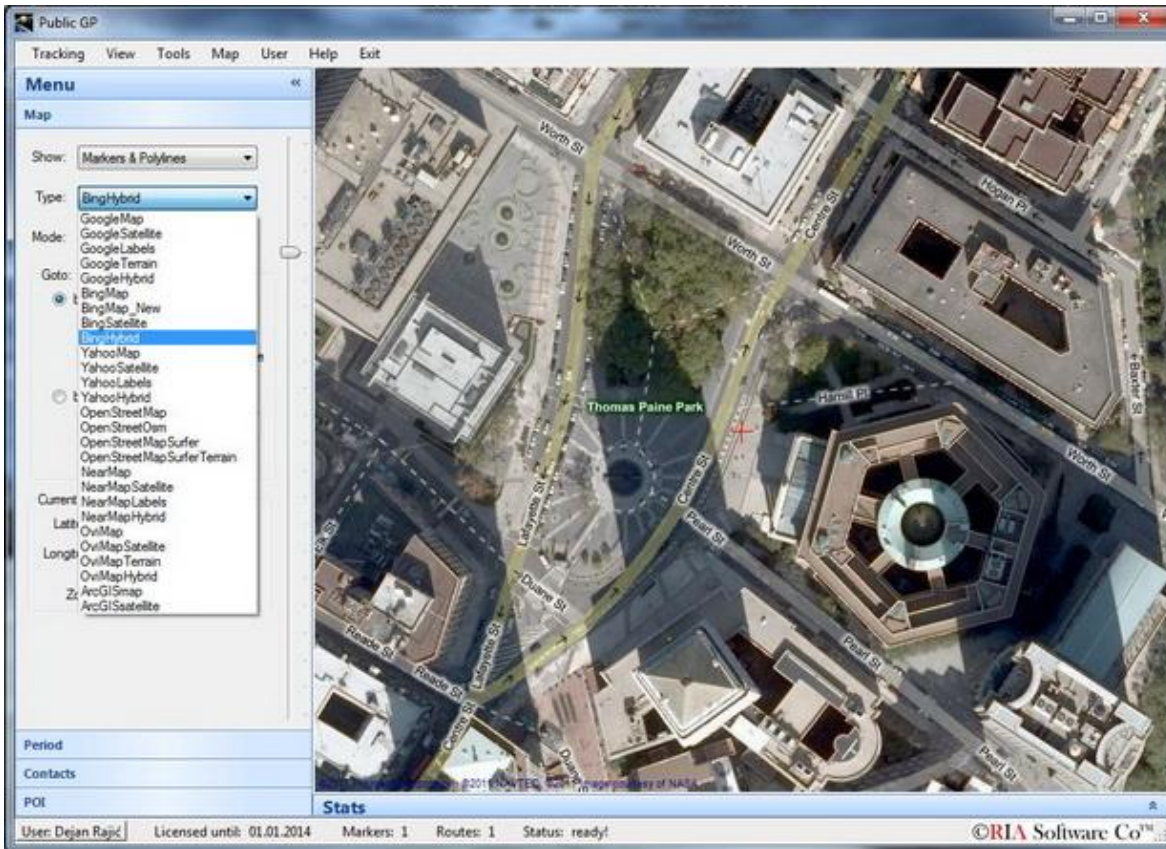


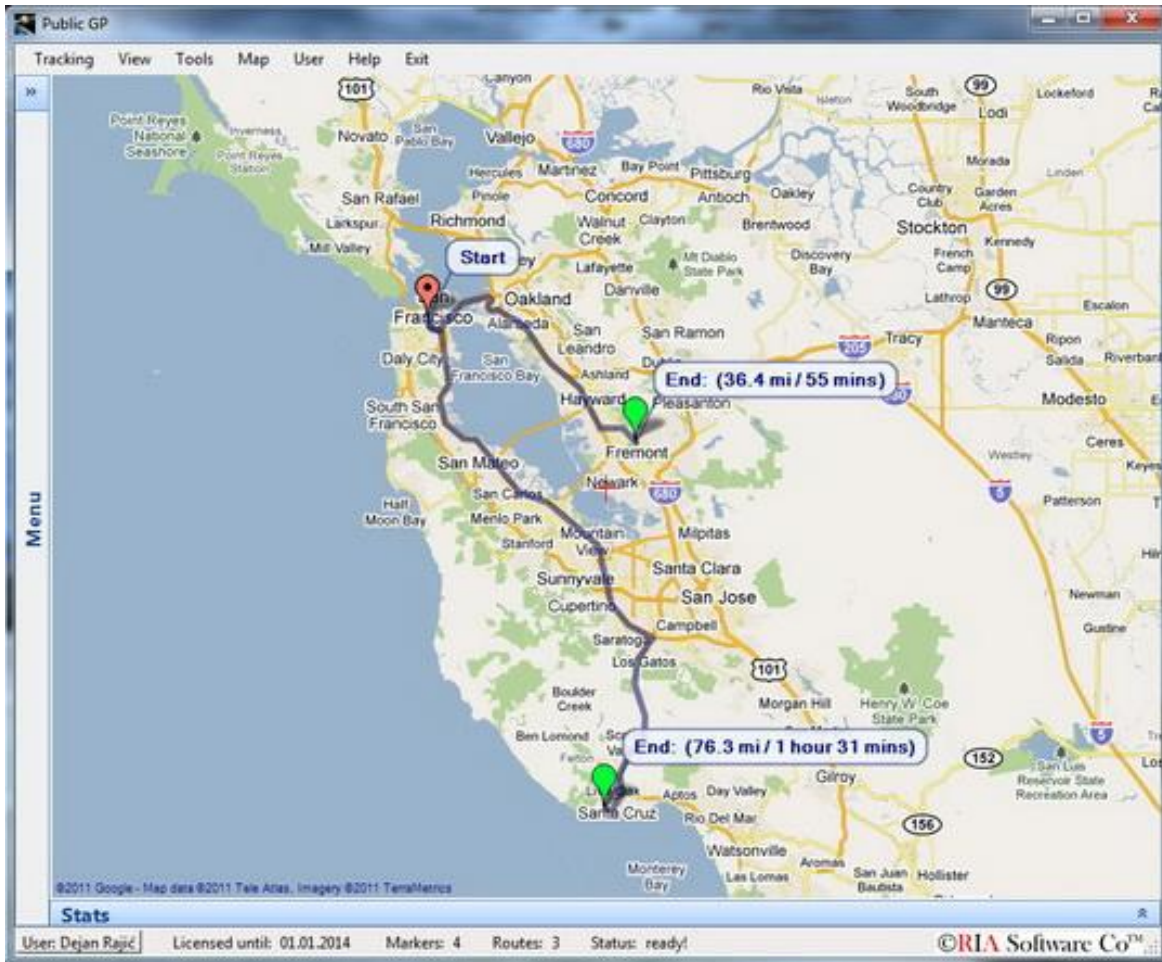
d) POI (Point Of Interest) – Add your POI-s, that are a business or private interest, such as a house, business premises, schools, cinemas, museums, etc.



3. Stats menu, located at the bottom of the program, which provides information about each contact (after locating the contact, you select it on map, to get this informations) about the device, the last activity, maximum and average speed of movement, length of route, chart speed, where you can find all the breaks that were made, and speeding, as well as specially designed 'player', by which you can move the marker along the line, and thus simulate the movement.

Here are some examples of how maps can look, and making (planning) the route:





4. Status line, which provides information about the current user, the license expires, the number of markers and routes, and the current status of software.

Grouping of contacts you can make using 'Groups Editor' as shown on picture:



Adding/removing and setting contacts can be done in 'Contacts Editor':



POI Editor:



Almost all options and settings you make in the program will be recorded on the server, so no matter where you are, the program will be exactly the same set. Exceptions are the options that do not exist in the Web version, so therefore are recorded locally.

Some options are shown in the following images:

This screenshot shows the 'Default settings' tab of the 'Options' dialog box. It contains several configuration options for the map display:

- Map show: Markers & Polylines
- Map type: GoogleMap
- Map mode: Server & Cache
- Map start address: paraćin, serbia
- Map start zoom: 10
- Auto-update timer: 10
- Auto-update view:  keep map current pos/zoom
- Auto-update type: by Routes

Buttons at the bottom include 'Save', 'Save ALL', and 'Back'.

This screenshot shows the 'Personal data' tab of the 'Options' dialog box. It contains personal information fields:

- ID: 2
- Display name: Dejan Rajić
- Display picture: [Image]
- First name: Dejan
- Last name: Rajić
- Company: RIA Software Co
- Address: Laze Lazarevica 27
- Postal (ZIP) code: 35250
- City: Paraćin
- Country: Serbia
- Phone: +381 63 61 69 64
- Email: rajcdejan@gmail.com

Buttons at the bottom include 'Save', 'Save ALL', and 'Back'.

This screenshot shows the 'Account data' tab of the 'Options' dialog box. It contains account and device configuration fields:

- Account type: Admin
- User name: rajapri
- Old password: [Masked]
- New password: [Empty]
- Confirm new password: [Empty]
- Device type: Personal
- Device Protocol: Mollipao
- Device IP: 109.245.0.217
- Device SIM: [Empty]
- Info: PN 001-DR

Buttons at the bottom include 'Save', 'Save ALL', and 'Back'.

This screenshot shows the 'Admin data' tab of the 'Options' dialog box. It contains administrative settings:

- Company logo: [Image]
- My status: Online

Buttons at the bottom include 'Save', 'Save ALL', and 'Back'.

## WEB version

A WEB version is accessible from this server:

<http://gps.riasc.net>.

Account demo/demo is available for demonstration.



On the home page there is the option of logging in, registering new users, extended subscription, download a new versions of the program.

Logging is similar to the PC version:



Public GPS registration

**Sign Up for Your New Account**

Display name:

First name:

Last name:

Company:

Address:

Postal (ZIP) code:

City:

Country: Serbia

Phone:

Device type: Personal

Device IP:

Device SIM:

User name:

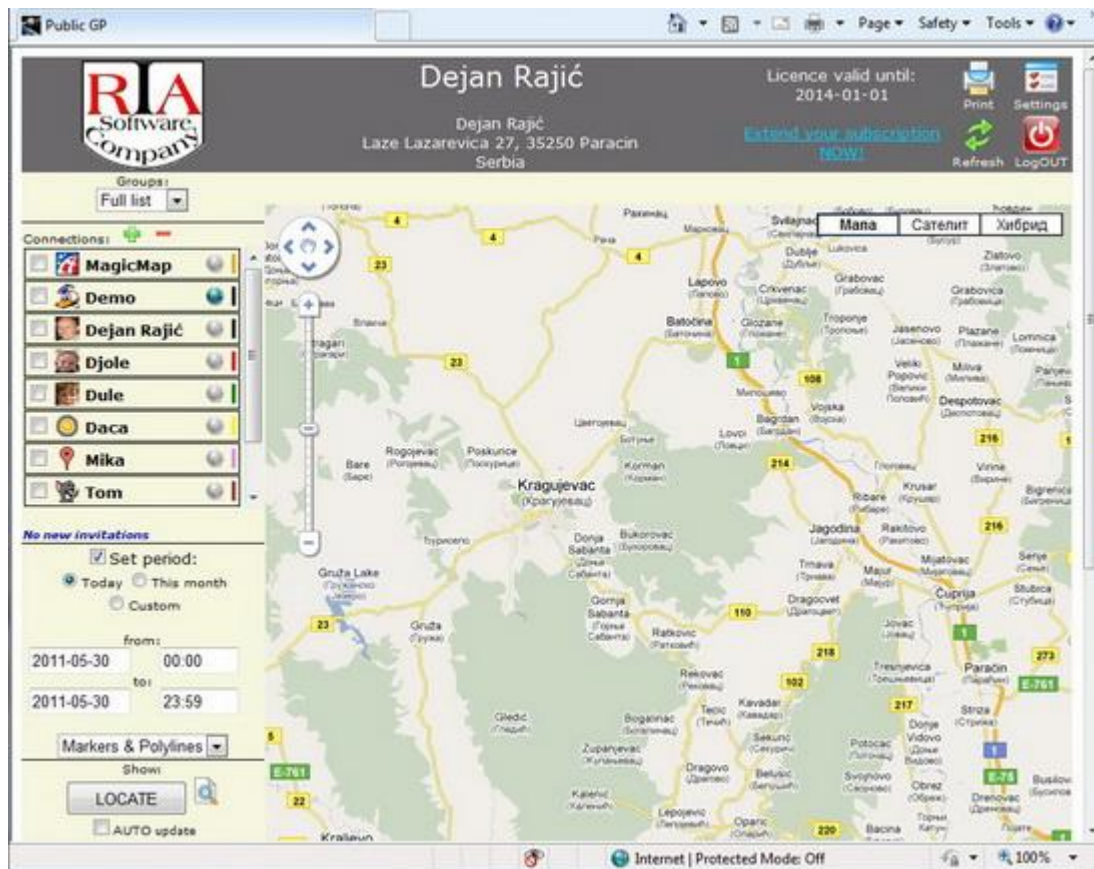
Password:

Confirm password:

E-mail:

Regardless of whether you create an account for yourself as an administrator, or user (changing the initial setting may be made only by the server owner!), try to provide as much of informations as you can, cause this may later mean a lot to you and to others (if you publicly share your account). Subsequent changes is of course possible for PC and Web versions of PublicGP.

The main site page is shown in the figure below:

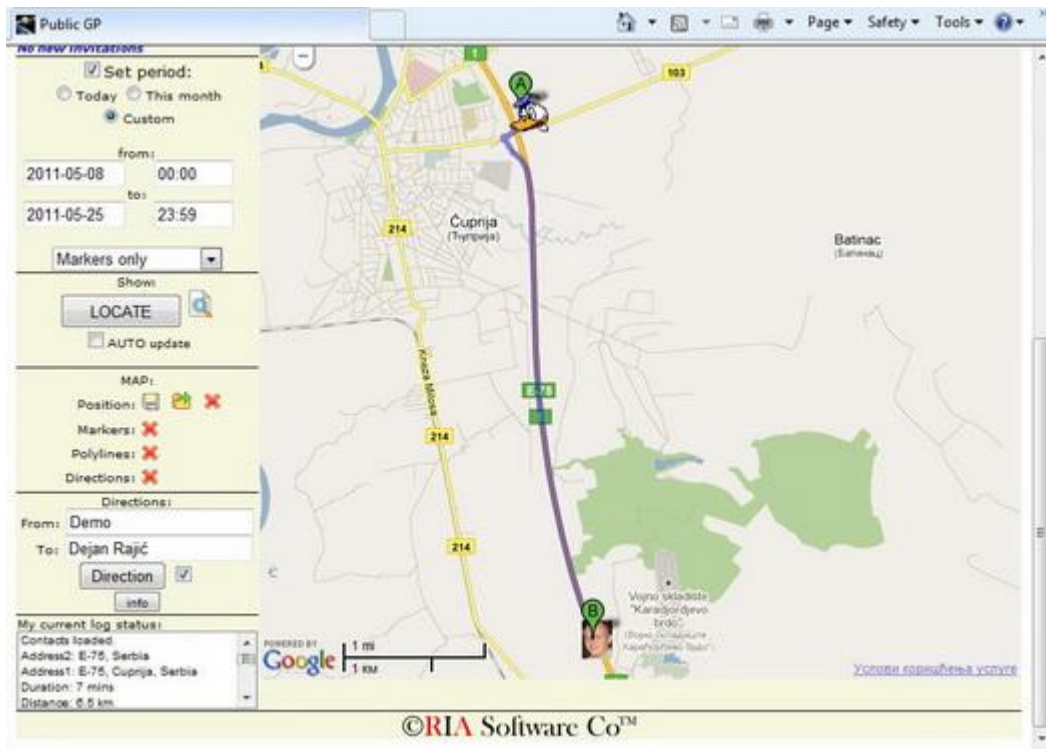
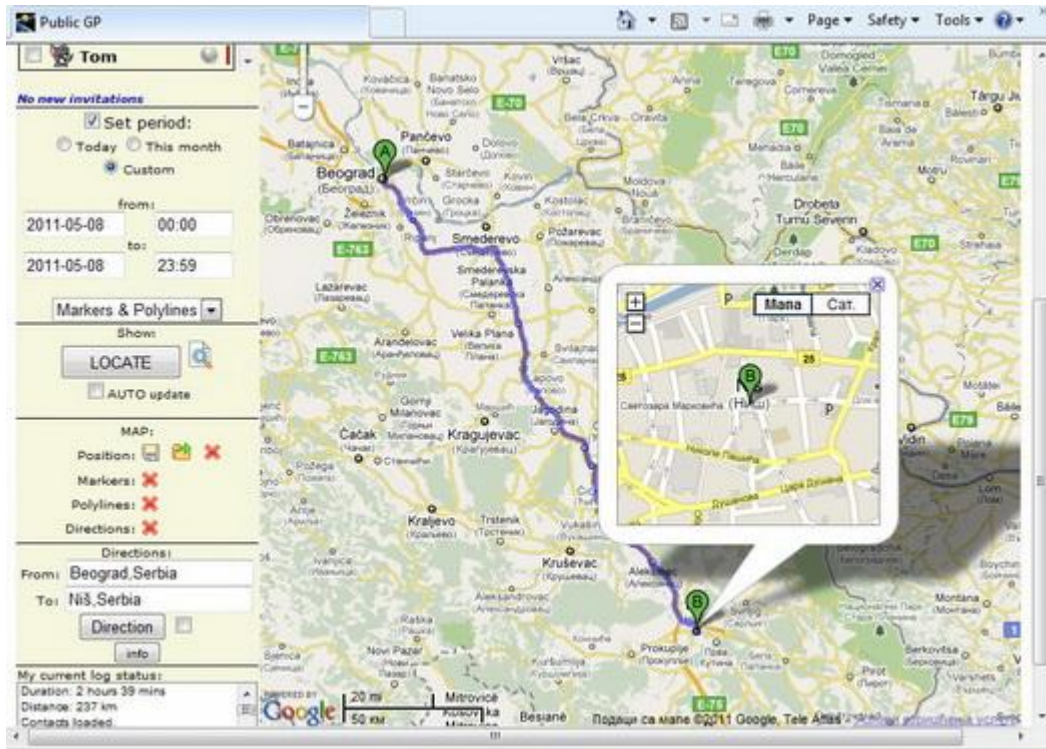


The basic functions are very clear, so that you only make selection of the contact you want to display, and a period. Pressing the 'Locate' button will displays the marker and the motion path.



Among the other options we can mention the display of trip planning, as well as the shortest path between two selected contacts.

In the status log you can find the current position, the distance between two points, and estimated time for passing the distance.



**Important:** Web version has far fewer options than the PC version, so we recommend using the PC version. Web version you can use only as a necessary alternative.

## PDA version

(for devices with Windows Mobile 5/6/6.5 platform)

Unlike the PC and Web versions of this program, the PDA version is adjusted for devices with built-in GPS, so that the phone actually works as a GPS tracker.

After standard logging (can be set to log in automatically with each starting the program), main program window shows up. It was made through the tabs, so all the options you have in one form:



Starting the server will start up the GPS device, and will start with readings. View your current location on the map. Every 20 seconds (or otherwise, if you choose so) phone will be sending its current position to a web server. For this function, you will be necessary to have an Internet connection. Bandwidth is not huge, but you are advised that, depending on the choice of mobile phone operator, you will have a different calculation of flow rates for different internal and international (roaming) traffic. Many operators offer special packages, that would be charged on the regular monthly bill, which would not have too much pressure on your budget.

Several particularly interesting options of PDA version are:

- 'SMS response' – Predefined telephone number with a predefined text can send SMS to this device, and automatically get back SMS with its current location. For example, as the displayed image, the owner of the phone will send a text message with text: 'pos', and in turn receive an SMS with the current position, speed, direction, and height, as well as an automatically generated URL link to a map on which to graphically show position of the person. SMS message that arrives on the phone, whose position was claimed will not be displayed or saved to the phone, it will simply be intercepted and deleted.
- 'Always ON' – Using combined with automatic starting, and hiding, it can be very interesting for people who want to secretly track a person. We warn you in advance that it could be punished in some countries, so please double check before you use this option. Another warning: Hiding applications will not be able to turn it off, so you may experience the problem. If that situation occurs, please contact us for help.

***Important:*** We are planning to build versions of software for the i-Phone, Blackberry, Symbian and WM7 operating systems.

## Server for tracking

This project consists of two programs:

- 'PublicGP listener'. This is actually a Windows service that receives all the data from the GPS tracker devices, processes them, and stores in a database. PC used for this purpose must have a broadband internet 24 / 7. Size of the flow is not critical, but it is preferable to 'ping' as fast as possible. MySQL database that is used for data storage can be installed on the same computer, but not necessary. Also, the same computer can be used as Web and e-mail server. Although Web site and MySQL database can be used from your existing provider. The condition is that the platform runs under the Windows Server 2003/2008 operating system.
- For complete control of all devices you will require the application to remotely changing the settings of the GPS trackers, 'PublicGP server'. Currently available is only control via SMS. Control over GPRS is under construction, and will soon be available, for devices that supports it. For SMS service, it is necessary to have a GSM modem (or mobile phone that connects to a PC and works as a modem). Lists of supported modem / phone we sends on request. One of the most interesting feature of this program is the ability to automatically send a new IP address of the computer that works as a server (in case you do not have static, but dynamic IP addresses) to all devices, listing all the GPS trackers, auto change their IP address (according to the last log), as well as sending SMS to any phone number.

PublicGP server (GPRS & SMS)

**IP**

IP address: 109.93.155.229

Update clients list

Update clients IP

**GPRS**

Send

**SMS**

Port: 6

Number:  Selected

Message:

Command: Send simple SMS

Extra data:

Send

ID	User name	Account	Active	Latest ping	Latest IP	Device IP	Device SIM	Email
1	Demo	User	True	30.05.2011 11:44:38	127.0.0.1	127.0.0.1	+381638069239	demo
2	Dejan Rajc	Admin	True	25.05.2011 8:23:44	109.245.0.217	109.245.0.217		rajodejan@gmail.c...
3	Djole	User	True	08.12.2010 22:45:57	111.111.111.111	111.111.111.111		pera@pera.pr
4	Dule	User	True	14.12.2010 22:45:57	222.222.22.2	222.222.22.2		rajodejan@gmail.c...
5	Daca	User	True	24.12.2010 22:45:57	111.121.54.7	111.121.54.7		rajodejan@gmail.c...
6	Mika	User	True	31.01.2011 8:48:54	109.245.55.186	109.245.55.186		rajodejan@gmail.c...
8	Tom	User	True	15.03.2011 10:31:42	109.245.0.47	109.245.0.47		
9	Jery	User	True	23.03.2011 12:58:03	109.245.0.82	109.245.0.82		
10	Twetie	User	True	28.02.2011 17:03:21	109.245.0.225	109.245.0.225		
7	MagicMap	Admin	True					magicmap@gmail...
11	bas	Admin	False					basdegun@hotmail...
18	Igor	Admin	True				0669518798	trupac@yahoo.com

Date	Message
30.05.2011 16:19:01	3 inactive users loaded.
30.05.2011 16:19:00	9 active users loaded.

## Benefits of GPS

Events on the maps are controlled in real time, 24 hours a day, 365 days a year.

Recent studies have demonstrated that this surveillance fleet has decreased daily mileage by 20%. The impact is visible in the reduction of accidents and damage. Drivers decrease their speed in average by about 16%, while the high percentage of 75% reduction in speeding. It then causes a reduction in fuel consumption by 9%. It also increases the performance of work, because you have under control all the parameters that affect the quality of transport and services.

In case of theft, all you need to do is to look for the data on the current position and direction of the vehicle, and contact the police.

The advantages in locating missing children or elderly people is huge. Many people even see the advantage of this system to track high value goods. Its used more often, with special features, for tracking and monitoring of pets.

## Information on appliances

### Personal Tracker PST100S/GT30i



The device has the following features:

- Tracking via SMS or GPRS (TCP/UDP)
- Current location report
- Tracking by time interval
- Two-way conversation
- Position logging capacity up to 260,000+ waypoints
- Built-in motion sensor for power saving
- SOS alert
- Geo-fencing control
- Low battery alert
- Speeding alert
- Alert when tracker enters/exits GPS blind area
- Alert when tracker is turned on
- Three buttons for making phone call and/or sending message

Item	Specification
Charging Voltage	DC 4.2-5.5V/400mA (Mini USB port)
Internal Battery	Rechargeable and replaceable 1350 mAh battery (3.7V)

Dimension	77 mm × 51 mm × 25 mm
Weight	96g
Operating temperature	-20° to 55° C
Humidity	5% to 95% Non-condensing
GSM modul	GSM 850/900/1800/1900Mhz
GPS Chipset	GPS SIRF-Star III
Work time	60 hours in sleep mode and 12 hours in normal mode
LED	3 LED lights to show power, GPS, GSM, and other stats
Button	3 buttons (SOS/B/C) for making phone calls or sending SMS

## Vehicle Tracker VT400



Uređaj ima sledeće funkcije:

- Tracking via SMS or GPRS (TCP/UDP)
- Current location report
- Tracking by time interval
- Two-way conversation
- Position logging capacity up to 260,000+ waypoints
- Built-in motion sensor for power saving
- Inbuilt Backup Battery
- SOS Panic Button
- Movement Alarm
- Geo-fencing Control

- Low battery Alarm
- Speeding Alarm
- GPS Blind Area Alarm (in/out)
- GPS Antenna Disconnection Alarm
- Power-cut Alarm
- Voltage Detection for External Power
- Engine Cut (Stop Engine)
- 2 Digital Inputs (1 negative and 1 positive triggering)
- 7 Analog Inputs
- 1 OC Outputs
- 1 Relay Output
- 1 RS232 Output (Optional)
- Waterproof (IP66)

Item	Specification
Power Supply	+9V - +36V/1.5A (without internal relay) +16V-+36V/1.5A (with internal relay)
Backup Battery	850mAh
Normal power consumption	85mA/h
Dimension	123*83*37mm
Installation Dimension	123*103*37mm
Weight	350g
Operating temperature	-20° to 55° C
Humidity	5% to 95% Non-condensing
Frequency	GSM 850/900/1800/1900Mhz
GPS Module	latest GPS SIRF-Star III chipset
GPS Sensitivity	-159dB
LED	2 LED lights to show GPS/GSM status.
Button	One SOS Button(share with Digital Input1)
Interface	2 digital inputs (1 negative and 1 positive triggering); 7 analog inputs; 1 OC output; 1 Relay output; 1 RS232 output (Optional).

## Prices

The following price list is applicable from: June 1st, 2011.:

No.	Description	Price (€)
1.	PublicGP software (PC version)	FREE
2.	PublicGP software (WEB version)	FREE
3.	PublicGP software (PDA version)	FREE
4.	Set PublicGP server, along with the installation of all it's software (once)	500,00
5.	PublicGP fee for each GPS Tracker device or mobile phone (per year)	30,00
6.	Technical support for all our applications	FREE

Here are direct links to make payment:

(4) Public Geo Positioning - WEB Service

<http://www.shareit.com/product.html?productid=300440702>

(5) Public Geo Positioning - 1 year subscription

<http://www.shareit.com/product.html?productid=300436773>

All future versions will be completely free!

Pricelist for devices (direct from manufacturer - essential imports from China) we send upon request. Approximate, count on the price of 75 \$ for personal upto about 110 \$ for a vehicle trackers. On these prices you should add postage and taxes.

***Important:** When importing, in some countries, government could ask for a special certificate from the Broadcast Agency, and separatly, from the manufacturer, documentation on the use of the permitted standards in the production of devices.*

If you are acquiring the devices in a personal direction, please contact us for a list of supported devices. If we currently do not support the type of device, it will be necessary to provide us a copy. There will be no separate charge for the subsequent development to support elected tracker. Device will not be returned.

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