



iON Base












The **iON Base** navigation user terminal is a device designed for installation on a vehicle or speciality vehicle to control the target use of vehicles and fuel as well as to track the object location, the state of the sensors and devices connected to the terminal. In addition, **iON Base** can be applied in monitoring of fixed-site facility operating conditions (vending equipment, boiler, diesel-generator units, oil storages, etc.).

1-Wire support provides connection of the driver identification system and thermosensors to the terminal, RS-485 enables connection of optional equipment, CAN (J1939/FMS) interface provides direct data reading from the on-board computer. Dual SIM card support provides smooth operation and traffic economy in a roaming area.

Navigation Terminal Features

The **iON Base** navigation terminal as the part of the tracking system has the following features:

- vehicle positioning (space coordinates) via the GPS/GLONASS module;
- overload, direction change, turns determination using the built-in accelerometer;
- data collection from the sensors:
 - fuel level sensors;
 - fuel flow sensor;
 - regular fuel level sensor (analog output or CAN bus);
 - regular axle load sensor;
 - temperature sensors;
 - operation of units and optional equipment.
- data collection from multipurpose inputs;
- external devices control via multipurpose outputs;
- data collection over CAN bus (J1939/FMS);
- data transmission from the terminal to the user's server;
- transmitted data storage in case of connection break;
- data transmission from alarm button;
- SMS messages and user commands processing.

	GPS/GLONASS		COMPLY WITH The Transport Ministry ORDER		BACKUP BATTERY
	SUPPLY CONTROL MANAGEMENT		DUAL-SIM		CHIP-SIM
	CAN J1939/FMS		ACCELEROMETER		EVALUATION OF DRIVER STYLE
	SPEAKERPHONE		USB		





Technical specifications	
Navigation receiver	GPS/GLONASS
Data transmission channel	GSM/GPRS 900/1800 MHz; (850/900/1800/1900 MHz)**; 3G (2100 MHz)**
Antennas	external GPS/GLONASS antenna
	external GSM antenna
Flash-memory	128 Mb (2,5 million of records)
SIM cards	dual SIM card support
	SIM chip**
Built-in accelerometer	three-axis
Additional features	firmware remote update, WEB
	connectors cover with the tamper sensor
	CAN-log support
Electrical specifications	
Supply voltage	from 9 to 40 V
Maximum voltage rating in a long-term mode	50 V
Current consumption in various modes (at 24V power voltage), not exceeding	75 mA (operating mode, the battery is charged)
	210 mA (operating mode, the battery is discharged)
	3,4 mA (6,1 mA at 12 V) (sleep mode)
Built-in Li-Pol battery	1250 mAh

Connectors and interfaces	
Connectors	Main Microfit 14 interface connector
	Additional Microfit 8 interface connector
	SMA connector for GSM antenna
	SMA connector for GPS/GLONASS antenna
	SIM card holder 1**
	SIM card holder 2
Main interfaces	Mini USB connector
	4 multipurpose inputs***
	2 multipurpose outputs***
	One RS-485 bus
	CAN-bus (J1939 / FMS)
	One 1-Wire bus
	RS-232 bus**
	voice communication
	USB
Physical specifications	
Dimensions	109 x 109 x 21 mm
Weight - not exceeding	210 g
Gross weight - not exceeding	560 g
Ingress Protection	IP54
Operating temperature range	from -40°C to +60°C

* technical specifications are subject to change by the manufacturer without prior notice

** optional

*** total number of inputs/outputs amounts to 4

