
















## iON Pro

The iON Pro navigation user terminal is the device designed for installation on a vehicle or speciality vehicle to control the proper use of a vehicle or fuel, to track the object location, the sensor and device states connected to the terminal. iON Pro can also be used for state monitoring of various parameters on fixed-site facilities (vending machines, boiler plants, diesel generator installations, oil terminals, etc.).

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 batch communication. The data on the server is available to a user through the dispatching software.

The iON Pro navigation terminal as a part of the monitoring system performs the following functions:

- locating vehicle using the GPS/GLONASS module;
- determining of overload, direction change, turns using the built-in accelerometer;
- data collection from the sensors;
- liquid level sensors;
- fuel flow sensor;
- regular fuel level sensor (analogue output or CAN bus);
- regular axle load sensor;
- temperature sensors;
- data collection from multipurpose inputs;
- external devices control via multipurpose outputs;
- data collection over CAN bus (J1939/FMS) and SAE (J1708);
- CAN-log support;
- data transmission from the terminal to a user server;
- transmitted data storage in case of disconnection;
- data transmission from alarm button;
- SMS and user commands processing.

	GPS/GLONASS		COMPLY WITH The Transport Ministry ORDER		BACKUP BATTERY
	SUPPLY CONTROL MANAGEMENT		DUAL-SIM		CHIP-SIM
	CAN J1939/FMS		SAE J1708		ACCELEROMETER
	EVALUATION OF DRIVER STYLE		EXTERNAL AND INTERNAL ANTENNAS		SPEAKERPHONE
	USB				





Technical specifications	
Navigation receiver	GPS/GLONASS
Data transmission bands	GSM/GPRS 900/1800 MHz; (850/900/1800/1900 MHz)**; 3G (2100 MHz)**
Antennas	external GPS/GLONASS antenna
	external GSM antenna
	built-in GPS/GLONASS antenna
	built-in GSM antenna
Flash-memory	512 Mb (10 million records)
SIM cards	dual SIM card support
	SIM chip**
	SIM heating
Built-in accelerometer	3-axis
Additional features	remote firmware upgrade, WEB
	webcam support**
	external display support**
	CAN-log support
	case with tamper sensors
Electrical specifications	
Supply voltage	от 9 V до 40 V
Maximum voltage rating in a long-term mode	50 V
Current consumption in various modes at 24 V power voltage, max	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	Li-Pol

Connectors and interfaces	
Connectors	main interface connector Microfit 14
	additional interface connector Microfit 8
	SMA connector for GSM antenna
	SMA connector for GPS/GLONASS antenna
	SIM card holder #1
	SIM card holder #2**
Interfaces	Mini USB connector
	6 x multipurpose input***
	2 x multipurpose output***
	SAE bus (J1708)
	2 x RS-485 bus***
	CAN-bus (J1939 / FMS)
	2 x 1-Wire bus
	RS-232 bus**
	voice interface
	USB
Physical specifications	
Dimensions	109 x 109 x 21 mm
Weight	220 g
Gross weight	660 g
Ingress Protection	IP54
Operating temperature range	-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 6

