



NAVIGATION CONTROLLER

DOT L4

TECHNICAL PASSPORT

GENERAL INFORMATION

DOT L4 (hereinafter the “tracker”) is the most compact navigation controller in the range, operating on 2G and 4G networks for remote monitoring of mobile and stationary assets. The device supports simultaneous data transmission to two servers and is compatible with any software platform supporting one of the following protocols:

- INTERNAL (Wialon, Gelios, etc.) — the manufacturer’s open proprietary protocol, available for integration. The modem IMEI is used to identify the device on the server.
- EGTS without authentication (RNIS | RNIC). The device ID (SN) is used for identification on the server.
- EGTS with authentication (JSC GLONASS | ERA-GLONASS). The modem IMEI is used for identification on the server.

Functions and key features

For more comprehensive monitoring of the vehicle or its installed equipment, the device **supports connection of various sensors**, including **digital, analogue, frequency/pulse** and **Bluetooth** sensors.

The backup battery ensures continuous operation if external power is disconnected. The device sends a notification when it switches to backup power.

The built-in motion sensor is used to optimise power consumption.

Additional features, such as **universal BLE integration, GSM operator blocklists and allowlists**, **make** the device versatile and convenient for monitoring applications.

TECHNICAL SPECIFICATIONS

Specification	Notes	Value
Dimensions, mm	Excluding wires	61 × 42 × 15
Weight, g	Excluding wires and battery	36
Supply voltage, V	Excluding transient voltage spikes	7 – 95
Operating temperature range, °C	Excluding battery	–40 to +85
Positive-triggered inputs, qty	Logic “1” level in digital mode: at least 7 V; measurement range: 0.6 to 110 V	1 (A1)
Negative-triggered inputs, qty	Logic “1” level in digital mode: no more than 50 V (up to 2 A)	1* (U0)
Low-side outputs, qty	Switching current: up to 2 A at 12 V	1* (U0)
Motion sensor (accelerometer)	Built-in	Yes
SIM card slots, qty	nanoSIM format	1
SIM chips, qty	Optional	1
Backup battery capacity, mAh	Overcharge and deep-discharge protection; temperature-dependent charging control	100–250
Battery operating time, h	Specified for a 110 mAh battery	1.2
Charging time, h	Specified for a 110 mAh battery	1.5
Enclosure protection rating		IP54
Non-volatile memory, Mb	Up to 32,000 events	16
USB interface	USB Type-C. Diagnostics and configuration	Yes
Bluetooth 4.0 (LE) interface	Wireless sensors: fuel level, temperature and others (up to 8)	Yes
Cellular module		
Network type	2G 4G	
Frequency bands	FDD-LTE (Cat.1): B1 B3 B5 B7 B8 B20 GSM GPRS EDGE: 900 1800 MHz	
Antenna	Built-in	
GNSS module		
Positioning	GPS GLONASS BeiDou Galileo QZSS	
Antenna	Built-in	
Cold start, s	30	
Hot start, s	1	
Sensitivity, dBm	-166	
Positioning methods		
Satellite	Using GPS GLONASS BeiDou Galileo QZSS signals	
LBS	Using GSM base stations	
Location tags	Using wireless tags	

* Maximum available quantity. Some inputs/outputs share a pin and are multifunctional.

WARRANTY TERMS

The service life of the equipment, excluding the built-in battery, is 10 years.

The manufacturer does not guarantee software or hardware compatibility with software or equipment not included in the package, unless explicitly stated in the operating manual.

This warranty does not cover device upgrades.

Warranty coverage is void in the following cases:

- Failure to comply with the product operating instructions.
- Mechanical damage, whether external or internal.
- Faults caused by foreign objects, insects or liquids entering the device.
- Chemical, electrochemical, electrostatic or extreme thermal damage.
- Damage caused by power supply, communication or cable networks that do not comply with applicable national standards.
- Damage caused by the installation of components that do not meet the manufacturer's technical requirements.
- Repairs or preventive maintenance carried out during the warranty period by persons not authorised by the manufacturer.
- Damage to or removal of the manufacturer's seals on the equipment.
- Malfunctions resulting from external influences on the equipment or on the electrical circuit to which it is connected.
- Faults caused by third-party actions or other unforeseen circumstances unrelated to the equipment manufacturer's obligations.

PACKAGE CONTENTS

The tracker is supplied with the items listed in Table 2.

Table 1 — Package contents

N o.	Item	Qty	Notes
1	Navigation controller	1	Monitoring device
2	Main wiring harness	1	
3	Product passport	*	On request
4	Backup battery	*	On request

***Note:** the manufacturer reserves the right to change the package contents without reducing the product's performance or functionality.*

Warranty Card

Product name and
model

Navigation Controller
DOT L4

Serial number

Date of sale

___ / ___ / 20___

daymonth (in words)year

Seller

Seller’s signature
and stamp