

PRO-GEO

Geodetic GNSS receiver PRO-GEO
Synthesis of hardware and software solutions



Description

Measuring device for high-precision geodetic survey. It uses provided extra features:

- Inertial navigation system
- Environment sensor
- Onboard cameras images analysis

Featured with wireless communications: Wi-Fi, Bluetooth. Uses unique RTK solutions algorithms.

Supplies embedded and external GNSS antennas.

Field of use

Can be used to fulfill almost all the geodetic work tasks: Landscape survey, creating and scaling geodetic networks, cadastral geodetic tasks, 3D modeling, earthwork operation values review, launching the field project plan.

Common technical properties:

Measuring tolerance

Post-processing	2.5 + 1 mm for 1 km by plot 5 + 1 mm for 1 km by height
RTK	8 + 1 mm for 1 km by plot 15 + 1 mm for 1 km by height
DGPS	< 0.4 m MSD
SBAS	< 1 m
Autonomous	< 1.5 m

Correction data

Communication channels	GSM, UHF, SBAS
Protocols, standards	NTRIP, RTCM 2.X, 3.X, SSR (for PPP mode)

Environmental properties

Operating temperature	-40°C to +60°C not consider batteries
Storage temperature	От -40°C до +70°C not consider batteries
Ingress protection	IP67

Signals receiving and processing

Satellites systems	GLONASS, GPS, BeiDou, Galileo
GNSS signals frequency bands	L1, L2, L5, B1, B2, B3, E1, E5A, E5B

Survey modes

Post-processing	static, kinematic, «stop-n-go»
Real time	RTK, DGPS, PPP

Interfaces

Wired	Ethernet, CAN, USB, RS-232
Wireless	Wi-Fi, Bluetooth

Physical Properties

Dimensions	160 x 160 x H mm (height H depends on modules installed: from 120 mm)
Weight	from 1350 g (depends on modules installed)

Data exchange format supported

Formats	NMEA, RINEX, BINEX
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