

G-NAV

Inertial augmented GNSS smart antenna



GNSS at its best

- All-in-view Trimble L1/L2 RTK GNSS technology
- RTK (1cm) or SBAS (0,5m) positioning modes



Inertial augmentation

- Gyro MEMS inertial for dead reckoning
- 0,1° IMU for GNSS & inertial data fusion (option)



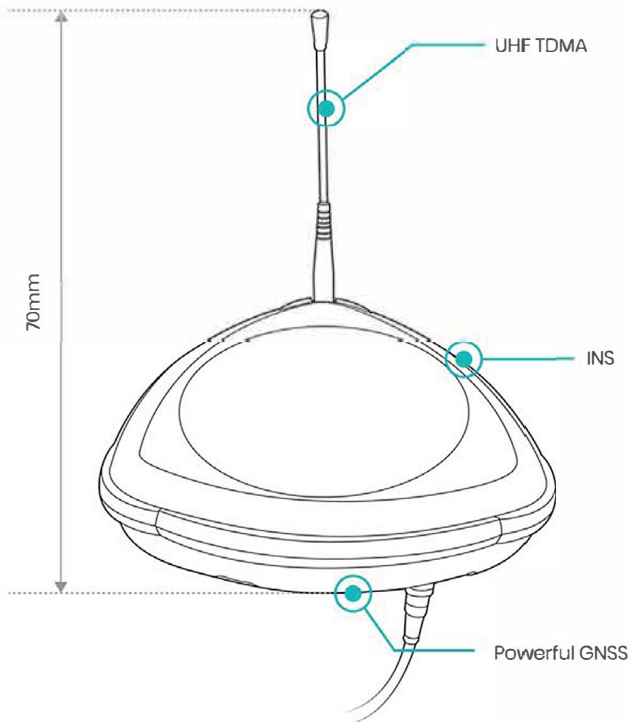
Real-time tracking

- Up to 10 rovers tracked each second
- TDMA protocols

G-NAV is the ideal plug & play device to place at the core of any sophisticated navigation system integrated with other sensors. G-NAV is particularly suitable when precise GNSS, relative positioning, inertial aided navigation, aided navigation and/or real-time tracking are required.

G-NAV comprises all radio modems to automatically acquire RTK differential corrections for cm accuracy. Last but not least real-time tracking operation is easy thanks to a unique built-in Time Division Multiple Access (TDMA) design securing the capability to track a fleet up to 10 rovers over a range of a few kilometres possibly with centimetre RTK precision.





Scope of supply

G-NAV smart antenna

PoE cable
(Power over Ethernet)

GSM module (internal)

Internal UHF
(if applicable)

Key features	
Powerful GNSS	Powered by Trimble® 240 channels L1/L2 RTK GNSS technology
Inertial Augmentation	MEMS gyro (standard) 0,1° accurate INS (option)
Radio links	Long range or licence free UHF options, GSM
Technical specifications	
Positioning	L1 & L2 GPS, GLONASS, BEUDU, GALILEO enabled (options available) RTK (1cm) - SBAS (0,5m)
Radio communication	GSM cell (standard) Long range UHF (403-470 MHz) option Licence free UHF (868 MHz) option
Tracking TDMA	
◦ Update rate	10 mobiles/second
◦ Mode	Absolute or relative positioning - DGPS or RTK
Wireless	Wifi
Data protocols	NMEA 0183
Physical characteristics	
Dimensions	
Weight	< 10 kg (weight depending on exact configuration)
Environment	
◦ Temperature	Operating -10°C to +40°C, Storage -20°C, +55°C
◦ Ingress Protection	IP67
I/O Interfaces	Ethernet (POE), Serial
Monitoring (LEDs)	2 LEDs for GPS reception & UHF link.
Power	
◦ Battery type	See accessories
◦ External DC	10-36V DC
Options and accessories	
Options	
◦ L-Band for RTX	
◦ TRACK - Real time tracking TDMA firmware	
Accessories	
◦ RS/IPPS cable	
◦ Regular NiMH battery (5 hours)	
◦ NiMH battery in stainless housing c/w cables & charger (10 hours)	

Specifications subject to change without notice

GEOD®

GEOD® is a trademark by CADDEN
supplier and developer of accurate positioning
systems for maritime and industrial applications

Parc du Petit Chatelier,
359 Route de Sainte Luce
44300 Nantes | France
info@geodproducts.com
+33 (0)251 824 646

geodproducts.com

