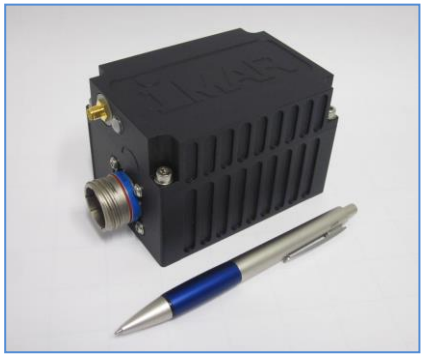
iDAGOS

True North Finding
Heading Reference System
based on Dual Antenna GNSS

iDAGOS is a miniaturized dual-antenna GNSS compass It is made for applications which require reliable performance in a small package and simple usage.

- True Heading
- Output of true heading with up to 20 Hz; optional output of position and velocity in WGS84
- RS422, CAN and USB interface
- PPS output for synchronization
- Used in naval, airborne and land applications

Due to its advanced architecture, **iDAGOS** provides true north related heading even under such motion conditions, where single antenna GNSS systems based systems fail (e.g. at standstill or motion with strong side slip angle).



So the **iDAGOS** is a most suitable sensor, coming in a robust enclosure including strong EMI/EMC filtering and over-voltage-protection, to provide Heading measurements and optional GNSS based position and velocity for many surface, airborne, naval and automotive applications.

With **iATTHEMO-A** iMAR provides an extended version of iDAGOS, which contains additionally an integrated MEMS based IMU to provide also roll and pitch besides heading, position, velocity, angular rates and acceleration with up to 200 Hz data rate.

Technical Data of iDAGOS:

Heading Accuracy:	< 0.5° rms true heading with 1 m antenna baseline and GPS available < 0.1 ° rms true heading with 5 m antenna baseline and GPS available Attitude /
Heading Resolution:	< 0.1 °
Heading Range:	±180 ° true heading
Attitude:	available with version **iATTHEMO-A** (integrated high rate roll/pitch/heading output)
Position/Velocity:	GPS/GNSS based (WGS84) as option
Digital Output:	heading / time in WGS84 via NMEA 0183 on RS422 / CAN / USB + solution status; optional (-P): position / velocity in WGS84 on RS422 / CAN / USB
Integrated Features:	Dual-Antenna L1L2 GPS; as an option (-G) additionally GLONASS
Digital Interface; start-up-time:	CAN (up to 1 MBit/s; remote and continuous), RS422 (up to 115,200 Bd), USB
Output Data Rate, Connector:	up to 20 Hz; MIL-C-38999 III 37 pin; 2 x SMA for GPS antennas
Temperature:	-40...+71 °C (case temperature);option: +85°C; storage: -55…+85 °C
Power:	11...34 V DC, approx. 7 W; integrated overvoltage protection up to 60 V
Size:	L x H x W = 105 x 70 x 75 (metal case, IP65); optional additional flange plate with 125 x 75 x 3 mm mounting holes available
Weight, Shock, Vibration:	approx. 550 grams; 90 g, 6 ms ; 20...2'000 Hz 5 g(rms) endurance

For new designs the usage of **iNAT-U200/RLD-CB** is recommended.

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