



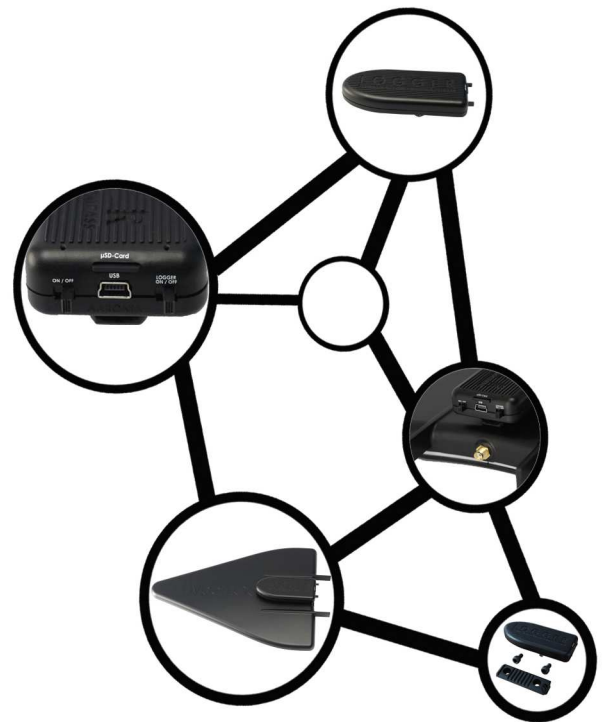
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# Aaronia GPS Logger with 6 Sensors

GPS, 3D Gyro, 3D Tilt, Digital Compass, Height Sensor & Accelerometer in one device

## Highlights:

- ◆ World's first GPS Logger with 6 Sensors
- ◆ Small & lightweight, weighs just 88 grams
- ◆ Incl. PC Software for Windows, MAC OS & Linux
- ◆ Extremely high data rate of approx. 35 logs / second
- ◆ Incl. microSD case, transport case, adapter, battery
- ◆ Fits directly on each HyperLOG X, EMI and Magnotracker Antennas



  
**AARONIA AG**  
 WWW.AARONIA.DE

Made in Germany



## Multi-Datalogger with 6 Sensors

The Aeronia GPS - Logger includes a total of 5 sensors, all of them on the cutting edge of technology, making it the world's first stand-alone data logger with such a variety of sensors.

The main purpose of the GPS logger consists of recording the position and even the orientation of the Aeronia antennas ( HyperLOG X , HyperLOG EMI or Magnotracker series) .The GPS sensor allows for easy collection and documentation of your measurement position , including elevation information .

Even more interesting is the Tilt-sensor and the digital compass, hereby the inclination and orientation of the antenna can be recorded and evaluated during the measurement. This special feature allows you to easily create an " RF heat map " including frequency , direction and strength of an RF source within 360 degrees.

## Speed / Data Volume

The Aeronia GPS-Logger offers a very fast update rate of up to 35 complete logs with all sensor data per second (on  $\mu$ SD-Card and/OR USB-Streaming) offering a "real time" display of the unit orientation.

At maximum rate the Aeronia GPS-Logger will produce around 50MB/hour (uncompressed)!

The maximum usable microSD volume is 2GB, offering a maximum recording time of about 2 days at full speed on the microSD card. The data rate can be adjusted to much lower rates to keep data volume much lower offering long time recording on the microSD card over weeks or even months.

## Operation / Assembly

The Aeronia GPS - logger can be used with the internal LiPo battery (standalone) and / or USB (provides unlimited operating time) .

The logger has three operating modes :

- Streaming / logging on the internal ( removable)  $\mu$ SD Card, completely independently as a stand- alone device
- Continuous recording via USB port (PC, Linux or MAC OS)
- Transfer of files stored in internal  $\mu$ SD Card (PC, Linux or MAC OS)

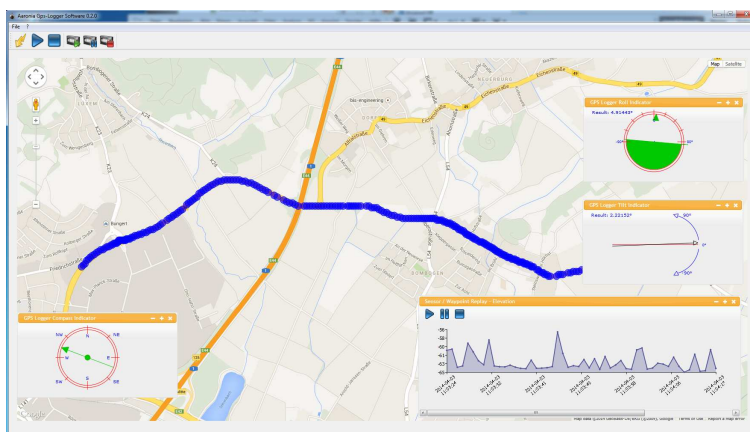
The Aeronia GPS - logger can be mounted directly on HyperLOG X, Magnotracker and HyperLOG EMI antennas (screws and adapter included). It can also be mounted on any other device , car, etc. with the included adapter. This only requires 2 holes to be drilled to attach the supplied adapter.

## Technical Data

- ◆ High End 66 Channel GPS Sensor incl. antenna offering position (accuracy: 1,8 meters) , speed (maximum velocity: 515m/s with 0,1m/s accuracy) and height (maximum altitude: 18.000 meters) information with a sensitivity of -165dBm. Warm/cold start is only 34 seconds.
- ◆ 3D/Triaxial Compass offering 1° to 2° Degree Compass Heading Accuracy (Wide Magnetic Field Range of +/- 8 Oe).
- ◆ 3D/Triaxial Accelerometer with up to 4mg resolution (+/- 2g, +/- 4g or +/- 8g range / 10.000 g shock tolerant)
- ◆ 3D/Triaxial Gyro/Tilt Sensor with a sensitivity of 14 LSBs per °/sec. (10.000 g shock tolerant /  $\pm$ 2000°/sec)
- ◆ Altimeter/PressureSensor with very high accuracy/resolution and a wide pressure range of 260-1260mbar and a height resolution of up to 20cm! (0,020 mbar RMS resolution)
- ◆ Scope of delivery: Logger with internal 650mAh LiPo Battery (run-time up to 7h), transport case, USB cable, mounting adapter & screws for assembly on HyperLOG X & Magnotracker Antennas, 2GB microSD card + adapter to SD & USB, PC Software & Manual on CD
- ◆ Dimensions (L/W/D): 102 x 42 x 21 mm
- ◆ Weight: 88gr



Scope of delivery



PC-Software

# References

## User of Aaronia Equipment (Examples)

### Government, Military, aeronautic, astronautic

- ◆ NATO, Belgien
- ◆ Boeing, USA
- ◆ Airbus, Hamburg
- ◆ Bund (Bundeswehr), Leer
- ◆ Bundeswehr (Technische Aufklärung), Hof
- ◆ Lufthansa, Hamburg
- ◆ DLR (Deutsches Zentrum für Luft- und Raumfahrt, Stuttgart)
- ◆ Eurocontrol (Flugüberwachung), Belgien
- ◆ Australian Government Department of Defence, Australien
- ◆ EADS (European Aeronautic Defence & Space Company) GmbH, Ulm
- ◆ Institut für Luft- und Raumfahrtmedizin, Köln
- ◆ Deutscher Wetterdienst, Tauche
- ◆ Polizeipräsidium, Bonn
- ◆ Landesamt für Umweltschutz Sachsen-Anhalt, Halle
- ◆ Zentrale Polizeitechnische Dienste, NRW
- ◆ Bundesamt für Verfassungsschutz, Köln
- ◆ BEV (Bundesamt für Eich- und Vermessungswesen)

### Research/Development, Science and Universitys

- ◆ Deutsches Forschungszentrum für Künstliche Intelligenz, Kaiserslautern
- ◆ Universität Freiburg
- ◆ Indonesien Institute of Science, Indonesien
- ◆ Max-Planck-Institut für Polymerforschung, Mainz
- ◆ Los Alamos National Laboratory, USA
- ◆ University of Bahrain, Bahrain
- ◆ University of Florida, USA
- ◆ Universität Erlangen, Erlangen
- ◆ Universität Hannover, Hannover
- ◆ University of Newcastle, Großbritannien
- ◆ Universität Strasbourg, Frankreich
- ◆ Universität Frankfurt, Frankfurt
- ◆ Uni München – Fakultät für Physik, Garching
- ◆ Technische Universität Hamburg, Hamburg
- ◆ Max-Planck Institut für Radioastronomie, Bad Münstereifel
- ◆ Max-Planck-Institut für Quantenoptik, Garching
- ◆ Max-Planck-Institut für Kernphysik, Heidelberg
- ◆ Max-Planck-Institut für Eisenforschung, Düsseldorf
- ◆ Forschungszentrum Karlsruhe, Karlsruhe

### Industry

- ◆ Shell Oil Company, USA
- ◆ ATI, USA
- ◆ Fedex, USA
- ◆ Walt Disney, Kalifornien, USA
- ◆ Agilent Technologies Co. Ltd., China
- ◆ Motorola, Brasilien
- ◆ IBM, Schweiz
- ◆ Audi AG, Neckarsulm
- ◆ BMW, München
- ◆ Daimler Chrysler AG, Bremen
- ◆ BASF, Ludwigshafen
- ◆ Deutsche Bahn, Berlin
- ◆ Deutsche Telekom, Weiden
- ◆ Siemens AG, Erlangen
- ◆ Rohde & Schwarz, München
- ◆ Infineon, Österreich
- ◆ Philips Technologie GmbH, Aachen
- ◆ ThyssenKrupp, Stuttgart
- ◆ EnBW, Stuttgart
- ◆ RTL Television, Köln
- ◆ Pro Sieben – SAT 1, Unterföhring
- ◆ Channel 6, Großbritannien
- ◆ WDR, Köln
- ◆ NDR, Hamburg
- ◆ SWR, Baden-Baden
- ◆ Bayerischer Rundfunk, München
- ◆ Carl-Zeiss-Jena GmbH, Jena
- ◆ Anritsu GmbH, Düsseldorf
- ◆ Hewlett Packard, Dornach
- ◆ Robert Bosch GmbH, Plochingen
- ◆ Mercedes Benz, Österreich
- ◆ EnBW Kernkraftwerk GmbH, Neckarwestheim
- ◆ AMD, Dresden
- ◆ Infineon Technologies, Regensburg
- ◆ Intel GmbH, Feldkirchen
- ◆ Philips Semiconductors, Nürnberg
- ◆ Hyundai Europe, Rüsselsheim
- ◆ Saarschmiede GmbH, Völklingen
- ◆ Wilkinson Sword, Solingen
- ◆ IBM Deutschland, Stuttgart
- ◆ Vattenfall, Berlin
- ◆ Fraport, Frankfurt