

Product Datasheet - Technical Specifications



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AARONIA

GPS LOGGER

WITH 6 SENSORS

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



Highlights:

- Small & lightweight, weighs just 88 grams
- 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
- 2 years warranty

**AARONIA AG**
WWW.AARONIA.DE



MADE IN GERMANY

Specifications

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 sensor data logs per second (on μ SDCard and/OR USB-Streaming) offering a "real time" display of the unit orientation.

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

The maximum usable microSD volume is 2 GB, 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) μ SD Card, completely independently as a stand-alone device
- Continuous recording via USB (PC, Linux, MAC OS)
- Transfer of files stored in internal μ SD Card (PC, Linux, MAC OS)

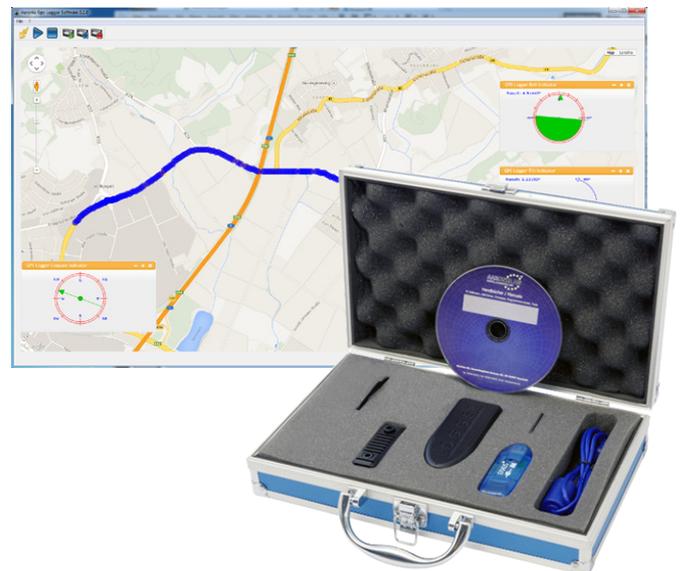
The Aeronia GPS - logger can be mounted directly on HyperLOG X, Magnotracker and HyperLOG EMI antennas (screws and adapter included). It can also be mounted on any other device, car, etc. with the included adapter. This only requires 2 holes to be drilled to attach the supplied adapter.

Technical Data

- High End 66 Channel GPS Sensor incl. antenna offering position (accuracy: 1,8 m), speed (maximum velocity: 515 m/s with 0,1 m/s accuracy) and height (maximum altitude: 18.000 m) information with a sensitivity of -165 dBm. Warm/cold start is only 34 s.
- 3D/Triaxial Compass offering 1° to 2° Compass Heading Accuracy (Wide Magnetic Field Range of +/- 8 Oe)
- 3D/Triaxial Accelerometer with up to 4 mg resolution (+/- 2 g, +/- 4 g or +/- 8 g range / 10.000 g shock tolerant)
- 3D/Triaxial Gyro/Tilt Sensor with a sensitivity of 14 LSBs per °/sec. (10.000 g shock tolerant / ± 2.000 °/sec)
- Altimeter/Pressure Sensor with very high accuracy/resolution and a wide pressure range of 260 - 1.260 mbar and a height resolution of up to 20 cm (0,020 mbar RMS resolution)
- Dimensions (L/W/D): 102 x 42 x 21 mm
- Weight: 88 g
- Warranty: 2 years

Scope of delivery:

Logger with internal 800 mAh LiPo Battery (run-time up to 7 h), transport case, USB cable, mounting adapter and screws for assembly on HyperLOG X and Magnotracker Antennas, 2 GB microSD card + adapter to SD and USB, PC Software and manual can be downloaded.



REFERENCES



Selected List of Aaronia Clients

Government, Military, Aero- and Astronautic

- **NATO**, Belgium
- **Department of Defense (DoD)**, USA
- **Department of Defence**, Australia
- **Airbus**, Germany
- **Boeing**, USA
- **German Armed Forces**, Germany
- **NASA**, USA
- **Lockheed Martin**, USA
- **Lufthansa**, Germany
- **German Aerospace Center (DLR)**, Germany
- **Eurocontrol**, Belgium
- **EADS**, Germany
- **Drug Enforcement Administration (DEA)**, USA
- **Federal Bureau of Investigation (FBI)**, USA
- **Federal Criminal Police Office (BKA)**, Germany
- **Federal Police**, Germany
- **Ministry of Defence**, Netherlands

Research/Development, Science and Universities

- **MIT - Physics Department**, USA
- **California State University**, USA
- **Indonesian Institute of Science (LIPI)**, Indonesia
- **Los Alamos National Laboratory (LANL)**, USA
- **University of Bahrain**, Bahrain
- **University of Florida**, USA
- **University of Victoria**, Canada
- **University of Newcastle**, United Kingdom
- **University of Durham**, United Kingdom
- **University Strasbourg**, France
- **University of Sydney**, Australia
- **University of Athen**, Greece
- **University of Munich**, Germany
- **Technical University of Hamburg**, Germany
- **Max-Planck Inst. for Radio Astronomy**, Germany
- **Max-Planck Inst. for Nuclear Physics**, Germany
- **Research Centre Karlsruhe**, Germany

Industry

- **IBM**, Switzerland
- **Intel**, Germany
- **Shell Oil Company**, USA
- **ATI**, USA
- **Microsoft**, USA
- **Motorola**, Brazil
- **Audi**, Germany
- **BMW**, Germany
- **Daimler**, Germany
- **Volkswagen**, Germany
- **BASF**, Germany
- **Siemens AG**, Germany
- **Rohde & Schwarz**, Germany
- **Infineon**, Austria
- **Philips**, Germany
- **ThyssenKrupp**, Germany
- **EnBW (Energie Baden-Württemberg)**, Germany
- **CNN**, USA
- **Duracell**, USA
- **German Telekom**, Germany
- **Bank of Canada**, Canada
- **NBC News**, USA
- **Sony**, Germany
- **Anritsu**, Germany
- **Hewlett-Packard**, Germany
- **Bosch**, Germany
- **Mercedes-Benz**, Austria
- **Osram**, Germany
- **DEKRA**, Germany
- **AMD**, Germany
- **Keysight**, China
- **Infineon Technologies**, Germany
- **Philips Semiconductors**, Germany
- **Hyundai Europe**, Germany
- **VIAVI**, Korea
- **Wilkinson Sword**, Germany
- **IBM Deutschland**, Germany
- **Nokia-Siemens Networks**, Germany

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