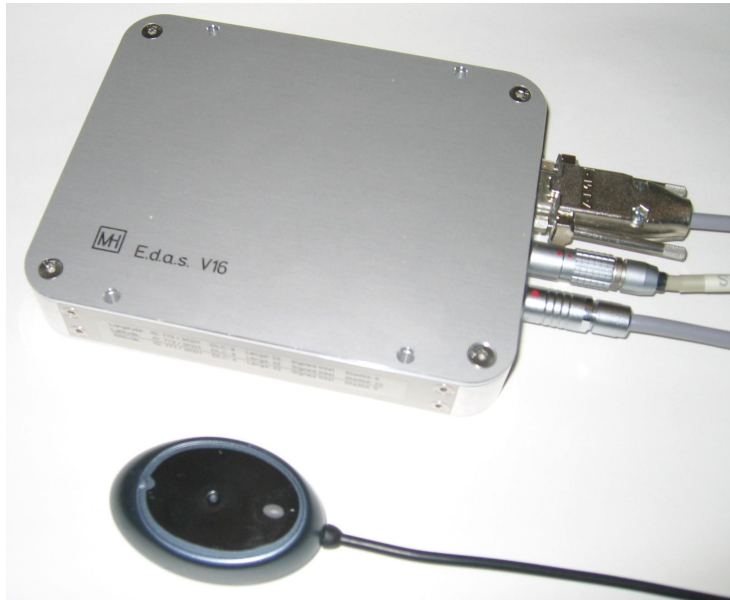


# E.d.a.s.V16-GPS



## GPS-Receiver with CAN-Bus-Output

The E.d.a.s.V16-GPS-Modul receives data off position and offers its as CAN bus data.



## Features

- Builds on SiRFstarIII chipset with embedded ARM7TDMI CPU
- 20 parallel satellite-tracking channels for fast acquisition and reacquisition.
- 200,000 effective correlators for fast TTFF (Time-To-Fast-Fix), and Extremely fast TTFF's at low signal level.
- Built-in hardware Tracking Loop Processor WAAS/EGNOS Demodulator support.
- Built-in repeatable and rechargeable Lithium-ion battery for Time- to- First-Fix
- Support CAN bus data protocol.
- Enhanced algorithms provide superior navigation performance in urban, canyon and foliage environments.
- For Car Navigation, Marine Navigation, Auto Pilot, Tracking devices/systems and Mapping devices application

## Specifications

- Tracks up to 20 satellites
- Receiver: L1, C/A code
- Max update rate: 1 Hz
- Acquisition time  
Reacquisition 0.1sec.averaged  
Hot start 1 sec., averaged  
Warm start 38 sec., averaged  
Cold start 42 sec., averaged
- Position accuracy
  - Non DGPS (Differential GPS)  
Position 5-25 m CEP without SA  
Velocity 0.1 m/sec, without SA  
Time 1 usec sync GPS Time
  - EGNOS/WAAS  
Position  
< 2.2 m, horizontal 95% of time  
< 5 m, vertical 95% of time
- Dynamic Conditions:  
Altitude 18,000 meters  
(60,000 feet ) max  
Velocity 515 meters / second  
(700 knots) max  
Acceleration 4 G, max  
Jerk 20 meters/second, max
- Antenna Type: Built in Patch Antenna
- Minimum signal tracked: -159dBm
- Dimensions: 155mm x 125mm x 26mm
- Weight: 608 g / Antenna 84 g
- Waterproof Antenna: IPX7
- LED function: Power On/Off and Navigation
- Operating temperature: -40 °C to +80 °C
- Storing temperature: -45 °C to +100 °C
- Operating humidity: 5% to 95%, no condensing
- Supply: 9 to 36 V DC / 150 mA at 12 V DC  
Pin 1: Gnd Pin 2: + DC
- Interface: CAN-Bus, 500 kBaud
  - Longitude:
    - Identifier 770
    - Data bytes 8
    - Start bit 0
    - Length, bits 32
    - Format Signed Intel
  - Latitude:
    - Identifier 770
    - Data bytes 8
    - Start bit 32
    - Length, bits 32
    - Format Signed Intel
  - Altitude:
    - Identifier 771
    - Data bytes 4
    - Start bit 0
    - Length, bits 32
    - Format Signed Intel

## CAN Output

- Pin assignment of Sub D, 9p, male  
Pin 2: CAN Low Pin 7: CAN High

MH – Gesellschaft für  
Hardware/Software mbH  
Schloß Lechenich  
Schlossstraße 18  
D-50374 Erftstadt



Tel. +49 2235 6095 Fax. +49 2235 6097  
[info@mh-gmbh.de](mailto:info@mh-gmbh.de) [www.mh-gmbh.de](http://www.mh-gmbh.de)