



44.95 EUR  
incl. 19% VAT, plus [shipping](#)

- G-Sensor !
- u-blox6 !

**Support:** [Driver \(Windows\)](#)

VDB-800SG is new generation GPS Module, integrated G-Sensor technology.

#### Product Features

- 50-channel u-blox6 Engine with Over 2 Million Effective Correlators
- -146dBm SuperSense® Acquisition and Tracking Sensitivity
- AssistNow Online and Offline A-GPS Services,OMA SUPL Compliant
- 5 Hz Position Update Rate
- Highly Accurate and Reliable Navigation Performance
- Automatic Sensor Calibration and Temperature
- Operating Temperature : -40°C to 85°C
- Time To First Fix (TTFF) : <1 sec
- Standard Mini PCIe V1.2 Full-Mini Card (USB 2.0 Interface)

#### Receiver Type

Chipset

u-blox6 LEA-6S

Frequency	GPS L1, C/A Code GALILEO L1 Open Service (with upgrade) SBAS : WAAS, EGNOS, MSAS, GAGAN
Channels	Supports 50 Channels

**Sensitivity**

Tracking & Navigation	-160dBm
Acquisition	-160dBm
Cold Start (Autonomous)	-147dBm

**Time to First Fix (TTFF)**

Cold Start	28 sec
Warm Start	28 sec
Hot Start	<1 sec
Aided Start	<1 sec

**Accuracy**

Horizontal Position	Position : <2.5m CEP, SBAS : <2.0m CEP
Accuracy of Timepulse Signal	RMS 30ns
Max Navigation	99% <60ns
Update Rate	5 Hz (Max.)

**Dynamic Conditions**

Horizontal Position	<500 m/s (972 knots)
Accuracy of Timepulse Signal	<= 4g

**G-Sensor**

3-axis accelerometer

**Output Message Format**

GPS Protocol NMEA, UBX Binary, GGA, GLL, GSA, GSV, RMC, VTG, TXT

**Multipath Suppression**

Intelligent multipath detection and suppression

**A-GPS**

Supports AssistNow® Online and Offline, OMA SUPL Compliant

**Environmental Characteristics**

Operating Temp.	-40°C to +85°C
Storage Temp.	-40°C to +85°C
Peak Supply Current	Max=150mA
Max Performance	Acquisition =74mA
Eco Mode	Tracking = 43mA
Power Input	3.3V +-10% VDC input
Dimensions	51 x 30 (mm)

**Ordering Information**

Part Number	VDB-800SG-000
Description	Embedded u-blox6 GPS with <b>G-Sensor</b> Mini PCle Card