

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



- GPS/QZSS, GLONASS, BeiDou !
- 72-channels !
- -167dBm SuperSense !
- 10 Hz Update Rate !

**Support:**  [Specifications](#) | [Drivers \(Windows\)](#)

Embedded u-blox M8 GPS with G-Sensor Mini PCIe Card

**Features :**

- Concurrent Reception of GPS/QZSS, GLONASS, BeiDou
- 72-channel u-blox M8 Engine w/ Over 2 Million Effective Correlators
- 167dBm SuperSense® Acquisition & Tracking Sensitivity
- 10 Hz Position Update Rate
- Standard Mini PCIe V1.2 Full-Mini Card(USB2.0 Interface)
- Time To First Fix (TTFF) : <1 sec
- Operating Temp. : -40°C to 85°C

Specifications

**Receiver Type**

|           |   |
|-----------|---|
| Chipset   | u-blox M8   |
| Frequency | GPS L1 C/A, SBAS L1 C/A, QZSS L1 C/A, GLONASS L1OF, BeiDou B1 |
| Channels  | Supports 72 Channels  |

**Sensitivity**

|                         |         |
|-------------------------|---------|
| Tracking & Navigation   | -167dBm |
| Acquisition             | -160dBm |
| Cold Start (Autonomous) | -148dBm |

**Time to First Fix (TTFF)**

|             |        |
|-------------|--------|
| Cold Start  | 26 sec |
| Warm Start  | 26 sec |
| Hot Start   | <1 sec |
| Aided Start | <2 sec |

**Accuracy**

|                              |  |
|------------------------------|--|
| Horizontal Position          | Autonomous : <2.5m CEP, SBAS : <2.0m CEP |
| Accuracy of Timepulse Signal | RMS 30ns                                 |
| Max Navigation               | 99% <60ns                                |
| Update Rate                  | 10Hz (GPS & GLONASS), 18Hz (GPS)         |

**Dynamic Conditions**

|              |                      |
|--------------|----------------------|
| Velocity     | <500 m/s (972 knots) |
| Acceleration | <= 4g                |

**Output Message Format**

|                     |  |
|---------------------|--|
| GPS Protocol        | NMEA 0183 V4.0, UBX, RTCM2.3                               |
|                     | <b>Multipath Suppression</b>                               |
| Type                | Intelligent multipath detection and suppression            |
|                     | <b>A-GPS</b>   |
| Type                | Supports AssistNow® Online and Offline, OMA SUPL Compliant |
|                     | <b>G-Sensor</b>  |
| Type                | 3-axis accelerometer                                       |
|                     | <b>Environmental Characteristics</b>                       |
| 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)   |
|                     | <b>Ordering Information</b>                                |
| Part Number         | VDB-810G-000   |
| Description         | Embedded u-blox M8 GPS with G-Sensor Mini PCIe Card        |