

69.95 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 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

**Multipath Suppression**

Type

Intelligent multipath detection and suppression

**A-GPS**

Type

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-810-000

Description

Embedded u-blox M8 GPS Mini PCIe Card