

VTK-GPS-02/DR02/DR03

u-blox M8N/M8L/M8U Module



VTK-GPS-02



VTK-GPS-DR02



VTK-GPS-DR03

Main Features

- An advantaged GNSS module for GPS, GLONASS, BeiDou and QZSS
- u-blox M8 GNSS positioning engine featuring excellent accuracy and time-to-first fix performance
- Automotive dead reckoning/untethered dead reckoning (by module)
- Proprietary form factor releasing a mPCIe slot for additional application
- Combines low power consumption and high sensitivity
- Wide-range operating temperature
- ESD and electrical protection

Product Overview

VTK-GPS-02/DR02/DR03 are advantaged GNSS modules from the exceptional performance of the u-blox M8 engine for concurrent GNSS (GPS, GLONASS, Galileo, BeiDou, QZSS and SBAS) positioning. VTK-GPS series deliver high sensitivity and minimal acquisition times with proprietary form factor releasing a mPCIe slot for additional application, it is easy and quick installation on any device to communicate position with vehicle system. Powerful automotive dead reckoning/untethered dead reckoning function by module. To satisfy server vehicles environments, VTK-GPS modules can be operated on a wide-range operating temperature from -40°C to 85°C. Besides, it is built-in ESD level $\pm 8\text{KV}/15\text{KV}$ (contact/air) according to IEC 61000-4-2 to protect the system.

Specifications

Form Factor

- Proprietary form factor

I/O Connector

- Dual 6-pin wafer connector
- 2-Pin wafer for coin battery (by request)

Function

- VTK-GPS-02
 - 1 x ublox NEO-M8N module for GPS, GLONASS, BeiDou and QZSS
- VTK-GPS-DR02
 - 1 x ublox NEO-M8L module for GPS, GLONASS, BeiDou and QZSS w/ automotive dead reckoning
- VTK-GPS-DR03
 - 1 x ublox NEO-M8U module for for GPS, GLONASS, BeiDou and QZSS w/ untethered dead reckoning

Dimensions

- 25.4mm (L) x 25.4mm (W) (1.0" x 1.0")
- Weight: 5g

Environment

- Operating temperatures: -40°C~85°C
- Storage temperatures: -40°C~90°C
- Related humidity (with system chassis): 5%~90%

Electrical Protection

- IEC 61000-4-2 electrostatic discharge (ESD): $\pm 8\text{KV}/15\text{KV}$ (contact/air)

Software

- Utility

Ordering Information

- **VTK-GPS-02 (P/N: 20V000GPS03X0)**
1 x ublox NEO-M8N module Ver.B
- **VTK-GPS-DR02 (P/N: 20V000GPS08X0)**
1 x ublox NEO-M8L-0 module V1.0 w/ dead reckoning, support 5V antenna
- **VTK-GPS-DR03 (P/N: 20V000GPS09X0)**
1 x ublox NEO-M8U-0-10 module w/ untethered dead reckoning, support 5V antenna