

NEO-M9V

GNSS dongle receiver with UDR and ADR

Features: Reference: ELT0164

- Continuous navigation in urban environment, even at signal loss with speed or wheel-tick information from the vehicle
- Intended for fleet management or micromobility applications
- On-board low noise 3.3 V voltage regulator and RF filter for noise blocking
- USB interface with type A connector
- SMA active antenna connector
- u-center Evaluation Software
- Extensive visualization and evaluation features
- Backup supercapacitor
- Dimensions with connectors: 75x25x13 mm
- Weight: 16.5 gr.

Hot start



| GNSS FEATURES | |
|---------------|--|
| Receiver type | 92-channel u-blox M9 engine GPS L1 C/A, QZSS L1 C/A/S, GLONASS L10F, Beidou B1I, Galileo E1B/C, SBAS L1 C/A: WAAS, EGNOS, MSAS, GAGAN |
| GNSS platform | Concurrent GNSS |
| Oscillators | TCXO |

| PERFORMANCE | | | |
|--|------------------------------------|--------------------------------|----------------------------------|
| Position accuracy (GPS+GLO+GAL+BDS) | 1.5 m CEP (v | with SBAS) | |
| Attitude accuracy (GPS) | 3.0 m CEP (\ | with SBAS) | |
| Position error during GNSS loss | 3D Gyro + 3I 3D Gyro + 3I | D Accel + Wheel Ticks D Accel | 2% 10% |
| Max nav. update rate | 50 Hz | | |
| Nav update rate (PVT) | 5 Hz | | |
| Navigation latency | 15 ms | | |
| Max sensor output rate | 100 Hz | | |
| Acquisition GPS+GLO+GAL+BDS GPS+GLO BDS+GLO | Cold start 24 s 25 s 28 s | Hot start 2 s 2 s 2 s | Aided start 3 s 2 s 3 s |
| Velocity accuracy | 0.08 m/s | | |
| Dynamic attitude accuracy | Heading Pitch Roll | 0.3 deg 0.4 deg 0.6 deg | |
| Sensitivity: Tracking and Navigation Reacquisition Cold start | -159 dBm -158 dBm -147 dBm | | |

-159 dBm

| OTHER FEATURES | |
|-------------------------------|--|
| Anti-jamming | Additional SAW filter and LNA, jamming detection and reporting |
| Anti-spoofing | Spoofing detection and reporting |
| Memory | Flash |
| Operating temperature | 0 °C to +50 °C |
| Supply voltage | 4.5 V to 5.5 V |
| Supply current | <45 mA (without external antenna) |
| External antenna requirements | Supply voltage 3.0 V Consumption current <50 mA |