GMV GSharp®

SAFE HIGH-ACCURACY RELIABLE POSITIONING FOR AUTOMOTIVE

gmv
INNOVATING SOLUTIONS

GNSS SATELLITES

GMV Global GNSS Station Network

GNSS Precise Corrections

Processing Servers

Regional GNSS Station Networks

Europe   North America   Others in progress

BACKEND SYSTEM

Safe Positioning Engine

Sensor fusion

Wheelticks   INS (IMU)

Safe Correction Service

GMV Product
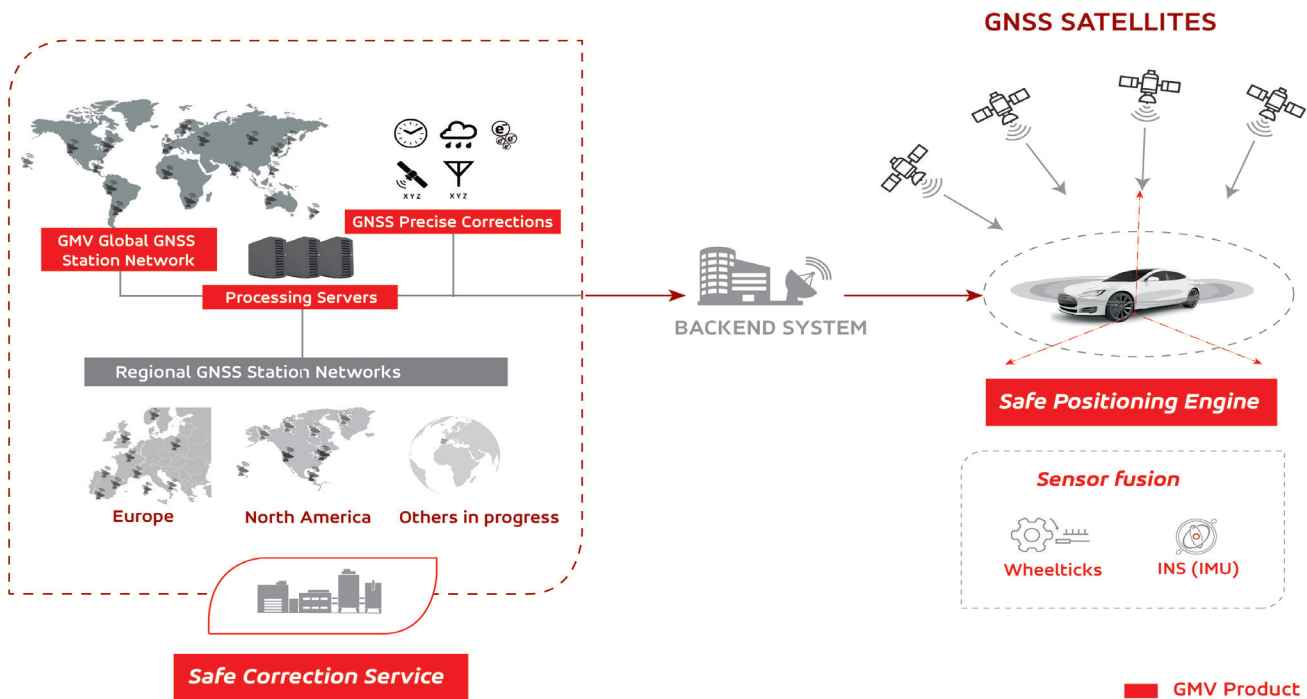
AUTOMOTIVE

GMV's safe precise positioning for autonomous driving

What is *GMV GSharp®* for Automotive?

- Complete GNSS Positioning Suite: **Positioning Engine & Correction Service**
- **Precise and safe algorithmic** solution for highly demanding **Autonomous Driving (AD)**
- **Integrity layer** for Safety-Critical Applications (ASIL B) (ISO 26262 – ISO 21488)
- **Multi-constellation** and **multi-frequency**
- **Proprietary Global GNSS**
- **Standard PPP** messages (RTCM-SSR, IGS-SSR) & RTK SSR2OSR conversion
- **Highly configurable & Flexible** to **Automotive Grade components** and **customers**
- **Hybridisation with other sensors** (IMU, odometers...)
- **Cybersecurity (ISO 21434)** for a reliable position with the necessary level of protection
- **Compatible with V2X** applications

What is our performance?

- Integrity Risk < up to 10^{-7}/h
- Service Availability (SLA) > 99,9 %
- Horizontal Accuracy < 10 cm (95%)*
- Convergence Time < 30 s
- Almost Instantaneous Reconvergence Time
- Service 24/7

* Nominal accuracy achieved with a mass-market automotive
GNSS receiver under open sky conditions
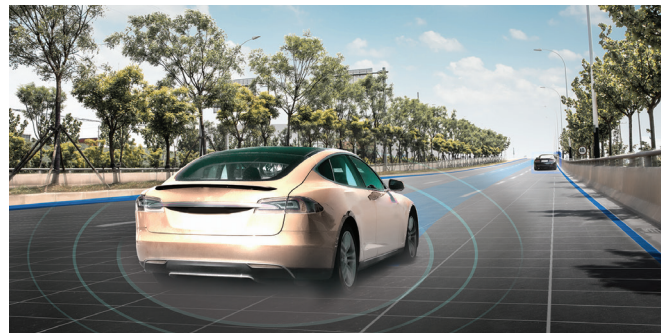
Cutting-edge safety technology based on our experience in EGNOS & GALILEO as responsible for GNSS safety critical elements and high accuracy positioning systems	**High accuracy & integrity** – SubLane-level accuracy – TIR 10-7/hour	**ASIL-B (ISO 26262 certified) plus additional standards fulfilled:** – ISO 21448 (SOTIF) – ISO/SAE 21434 – A-SPICE CL3	**Cutting-edge Safety validation** – RFSIM – Edit & Replay – Driving	**Trusted by OEMs** Solution already installed in vehicles in production

INTELLECTUAL PATENTED PROPERTY

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