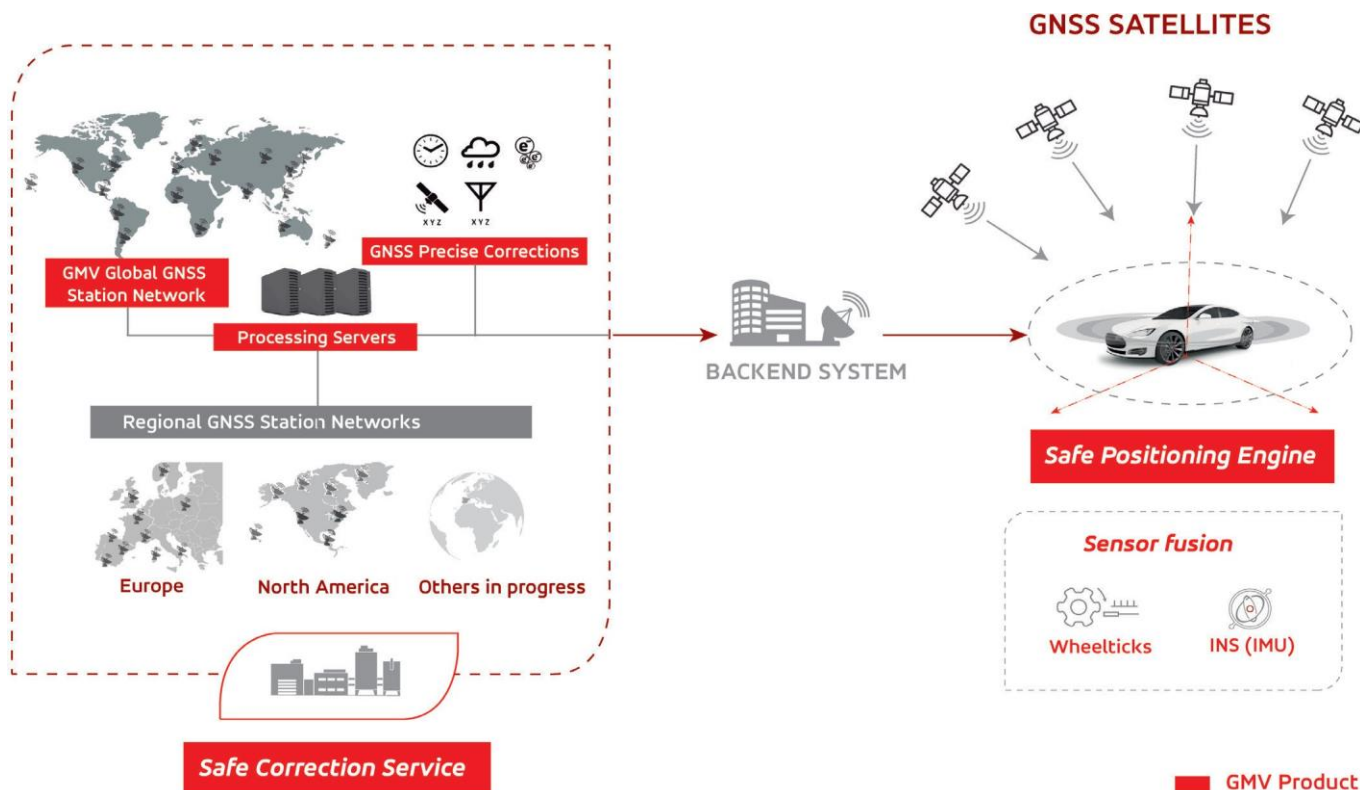


# GMV GSharp®



SAFE HIGH-ACCURACY RELIABLE POSITIONING  
FOR AUTOMOTIVE



AUTOMOTIVE

## GMV's safe precise positioning for autonomous driving



# What is GMV GSharp®?

- Complete GNSS Positioning Suite: **Positioning Engine & Correction Service**
- **ASIL-B (ISO 26262)** certified solution
- **Precise and Safe GNSS based positioning solution** for highly demanding **Autonomous Driving (AD)**
- Integrity concept compliant with **SOTIF (ISO 21488)**
- Multi-constellation and multi-frequency
- Proprietary Global GNSS Network
- PPP-RTK technology with standard PPP messages (RTCM-SSR, IGS-SSR) and RTK SSR2OSR conversion
- Highly Flexible SW meeting customer integration needs with different target platforms
- Sensor fusion with IMU, wheel ticks, and other sensors
- Cybersecurity mechanisms according to **ISO 21434**
- 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<sup>-7</sup>/hour



ASIL-B (ISO 26262 certified) plus additional standards fulfilled:  
- ISO 21448 (SOTIF)  
- ISO/SAE 21434  
- A-SPICE CL3  
- Jamming & Spoofing protection



**Thorough Safety Validation**  
- RFSIM  
- Edit & Replay  
- Driving



Trusted by OEMs  
Solution already installed in vehicles in production

