

Global 50 cm (CEP) PPP Using Single Frequency Low-Cost GNSS Chips and Modules

Profound-IP3

Instant Precise Point Positioning

Profound Instant PPP (IP3) is the first precise point positioning (PPP) firmware in the market that works with low-cost GNSS chips and modules. Backed by PPI's PPP+ technology, IP3 features multi-constellations, global availability, fast convergence and continuous navigation solutions through novel integration of low-cost GNSS and PPP technology.

High Precision

IP3 offers 50 cm (CEP) positioning accuracy with single-frequency GNSS signals and further enhanced positioning accuracy and reliability with additional L2C/L5 signals, all using low-cost GNSS chips and modules.

Fast Convergence

IP3 offers fast convergence within seconds, ready to support operational applications requesting instant solutions such as vehicle navigation and mobile device location.

Customization

IP3 can be customized to work with various low-cost GNSS chips and modules and run in real-time for different mainstream processors.

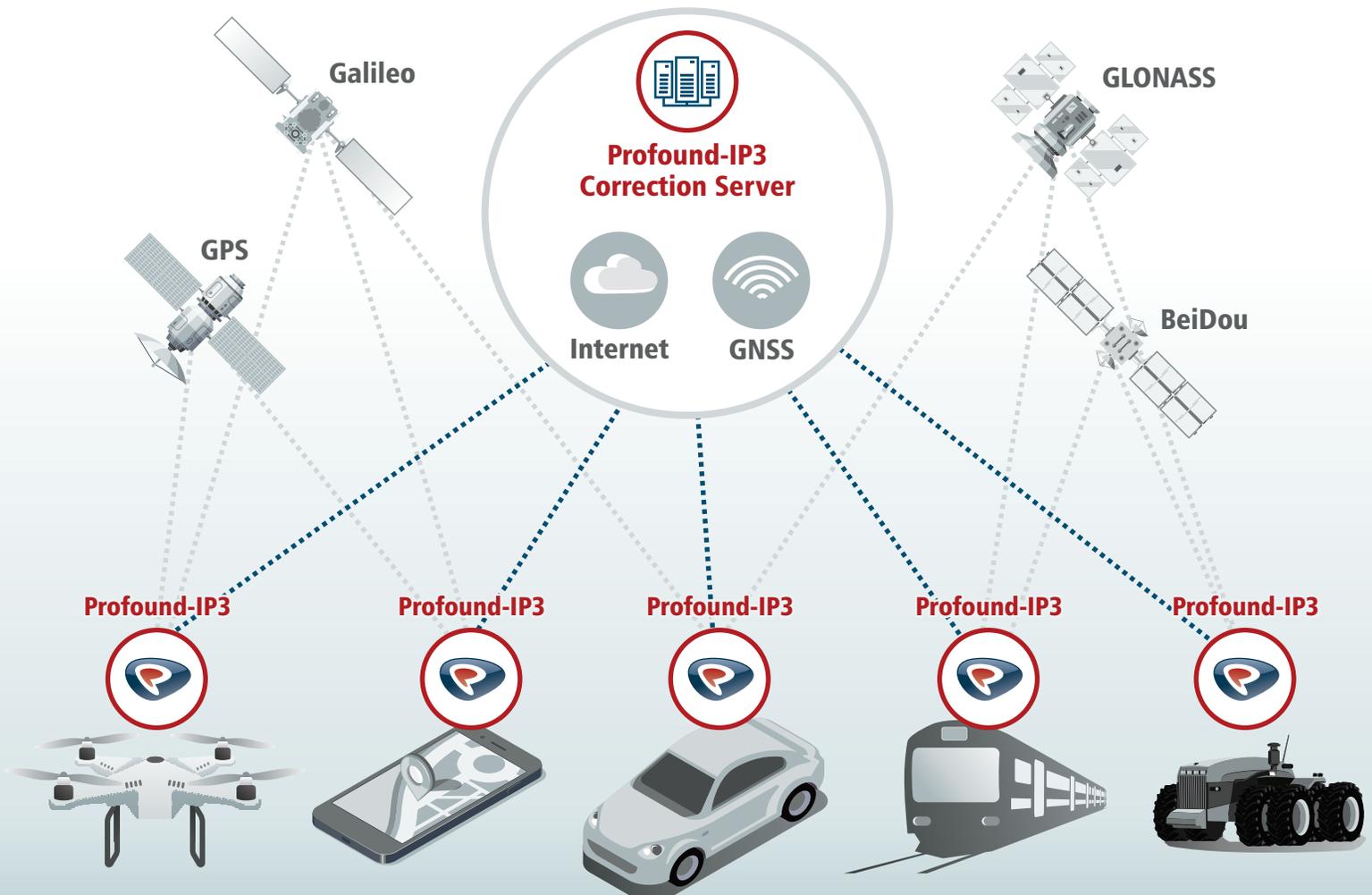
Availability

IP3 offers worldwide availability of precise and consistent positioning and navigation solutions. No loss of precision even in difficult signal environments.

Multi-constellation GNSS

IP3 supports all current GNSS constellations, including GPS, GLONASS, Galileo, BeiDou, QZSS and IRNSS.

Evaluation Kit



Profound-IP3

Instant Precise Point Positioning



Key Features

- Low-cost precise GNSS solution.
- Fast convergence within seconds.
- Support single (L1) and dual frequency (L1 + L2C/L5) signals.
- Support all current GNSS constellations.
- Worldwide availability of consistent navigation solutions.
- Insensitive to latency and loss of augmentation data.
- Firmware library can be customized for different receivers/processors.
- Optional: can be fully integrated with other Profound products such as Profound-DR for uninterrupted 50-cm level navigation applications (e.g. for autonomous level-2 driving) in all environments (e.g. underground parkades and tunnels).

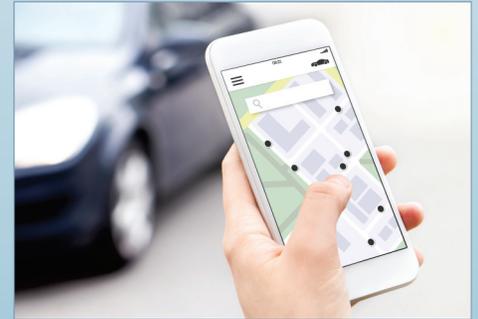
Target Applications

Precise location information obtainable at low-cost plays a crucial role for mass-market applications such as:

- Self-driving cars in intelligent transportation systems.



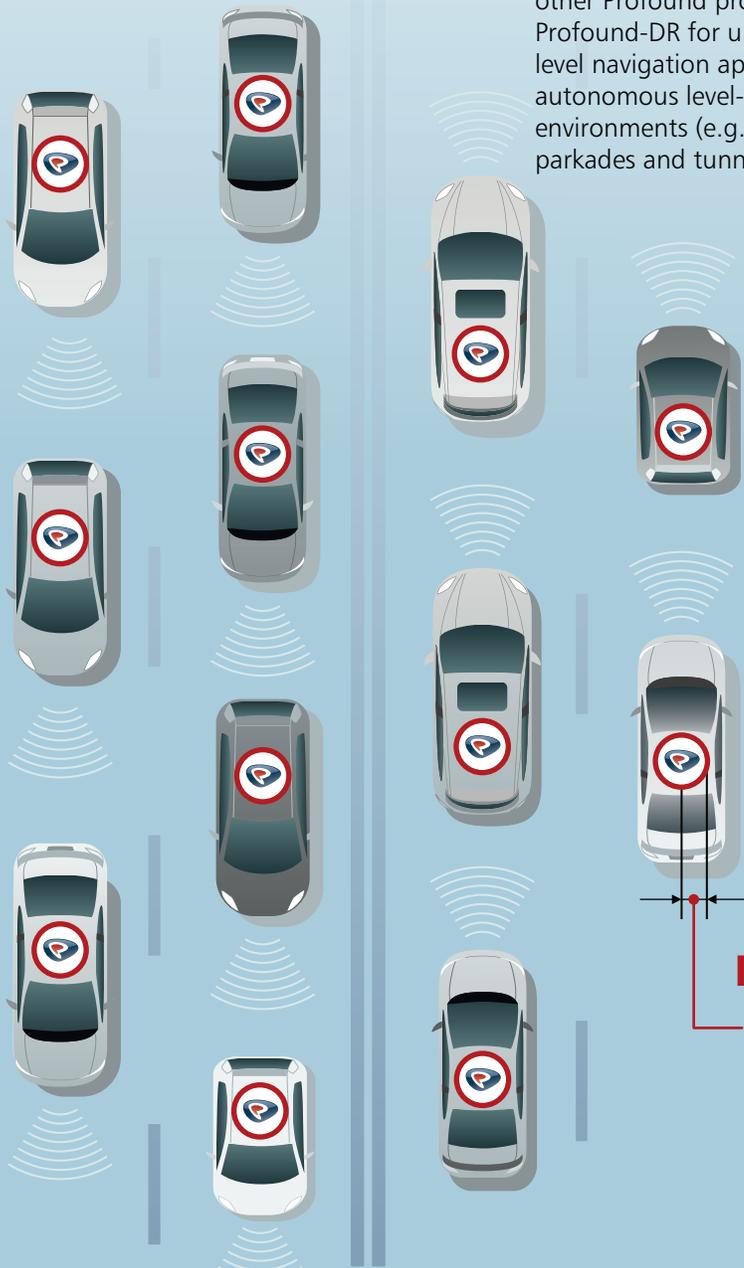
- Mobile devices to create value-added services.



- UAV in confined environments.



By novel integration of low-cost GNSS and PPP technology, IP3 is an ideal precise positioning solution for mass-market applications and as a turnkey for OEM manufacturers and system integrators to develop quick-to-market products.



Profound-IP3
IP3 Accuracy
of 0.5 m CEP

PPI © 29/10/2020



www.profoundpositioning.com