location.io
empower your location services
a location services enabling platform by **networks** ™

A location service platform developed to provide high quality location and assistance data.

Overview

location.io is a comprehensive location platform providing GNSS assistance data and location services for every need. **location.io** optimally combines satellite, Wi-Fi, cellular and sensor signals to help devices and networks quickly and accurately resolve mobile positions. Our patented solutions include embedded software and cloud-based services designed to easily integrate with any location technology vendor's chips and servers.

For outdoor applications, these include all flavours of GNSS assistance – GPS, GLONASS, BeiDou & Galileo – designed to boost the performance of any GNSS-equipped device. For indoor performance, these include global databases of Wi-Fi & cell tower locations, advanced hybrid positioning algorithms and real-time barometric reference for floor-level detection. And for those über-challenging indoor situations, we've designed a cloud-based service that can position anything virtually anywhere.

Since 2006, the world's leading semiconductor vendors, device manufacturers and network operators quietly rely on Rx Networks to empower their location needs. And they choose **location.io** because they know we're fanatical about reliability. Everything we do is designed for, and backed with, our 99.999%, carrier-grade Service Level Availability guarantee.

Services

➤ **Predicted GNSS ephemeris:** A highly efficient handset-based extended ephemeris A-GNSS solution supporting GPS, GLONASS, Galileo & BeiDou. Using a small client to generate the predicted GNSS ephemeris, **location.io** is able to support a wide array of devices with or without a network connection.

➤ **Real-time GNSS ephemeris:** GNSS assistance data generated from Rx Networks' Global Reference Network – a worldwide grid of over 26 reference receivers supporting GPS, GLONASS, BeiDou, Galileo and QZSS. Real-time data is available for chipset and OEM use as well as being compatible with all popular positioning servers.

➤ **GNSS long-term orbits and clocks:** High accuracy long-term orbit and clock predictions generated using data from Rx Networks' global reference network. Current constellations are GPS, GLONASS, BeiDou, Galileo with QZSS being added in 2016.

➤ **Wi-Fi & cell-ID positioning:** Real-time position lookup and optional A-GNSS service for devices equipped with any combination of Wi-Fi, cellular, and GNSS. Backed by an extensive global database, this service is ideal for both location applications and GNSS assistance.

➤ **Absolute height:** Vertical location service for devices with barometric pressure sensors. **location.io** can compensate for sensor differences, and provide an accurate altitude which is ideal for floor level detection required in emergency response or navigation.

➤ **Ultra-sensitive GNSS receiver:** Cloud-based software GNSS receiver highly tuned for accurate location deep indoors. Ideal for locating small cells, Wi-Fi access points and other indoor infrastructure.

location.io
empower your location services

Service	Details	
Predicted GNSS ephemeris	**Supported Constellations**	GPS, GLONASS, BeiDou(R&D) and Galileo(R&D)
	Time to First Fix (Chipset Dependent)	Warm start - 1 to 10 seconds Cold start – 2 to 15 seconds
	Accuracy SISRE(s) p68	GPS : Day 1 = 3.7 m, Day 7 = 7.2 m, Day 14 = 14.9 m GLONASS: Day 1 = 3.3 m, Day 7 = 9.3 m, Day 14 = 17.4 m BeiDou and Galileo accuracy available December 31st 2015,

Real-time GNSS ephemeris		
Real-time GNSS ephemeris	**Supported Constellations**	GPS, GLONASS, BeiDou, and Galileo QZSS (1H 2016)
	Supported Formats	RINEX, RRLP/LPP, Andrew, Ericsson, Qualcomm Contacts sales@rxnetworks.com for more details

GNSS long-term orbits and clocks		
GNSS long-term orbits and clocks	**Supported Constellations**	GPS, GLONASS, BeiDou, and Galileo QZSS (1h 2016) contact sales@rxnetworks.com for more details

Wi-Fi & Cell-ID positioning	
Wi-Fi & Cell-ID positioning	Wi-Fi: 600+ million Wi-Fi access points globally. Accuracy 10 – 100m. Cellular: 60+ million Cell-ID's globally. Accuracy 150m – 2km.

Absolute height	
Absolute height	Vertical accuracy of 2.5-3m when nearby used with regional pressure sensors and mobile crowd-sourcing Available globally from ± 75° latitude Altitude easily adapted to required geodetic coordinate system (e.g. WGS84)

Ultra-sensitive GNSS receiver	
Ultra-sensitive GNSS receiver	Constellations: GPS, GLONASS Accuracy: 5 – 15m Sensitivity: Down to -171 dBm