



NavtechGPS

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GNSS solutions for marine

Precision solutions for nearshore positioning



Count on the global leader in marine GNSS precision positioning technology



We keep marine leaders in the lead

The nearshore marine environment subjects you to the toughest navigation conditions on earth. Hexagon | NovAtel is a global technology leader, pioneering end-to-end solutions for assured positioning in the most complex and demanding environments.

Decades of experience in harsh marine environments have led to solutions that are reliable, easy to integrate and deliver future-ready features and capabilities. Our Global Navigation Satellite System (GNSS) receivers, antennas and correction services are used in the world's leading marine positioning, hydrographic survey and navigation applications.

You can count on NovAtel for a single purchasing source backed by exceptional customer support. Our marine positioning portfolio includes marine-certified antennas and receivers, robust inertial systems, reliable correction services and post-processing software.

Corrections

Oceanix premium GNSS corrections combined with GNSS receiver technology from NovAtel offers centimetre-level positioning in less than 20 minutes. Oceanix multi-constellation corrections are available globally, everywhere your marine application takes you.

Hardware

Rugged antennas, receivers and enclosures deliver high-precision and reliability even in the toughest marine conditions thanks to industry-leading low failure rates. We have a wide range of options to ensure you can get exactly what you need for your application.

Assured positioning

Protect your positioning, navigation and timing (PNT) measurements with our world-leading solutions including GNSS Resilience and Integrity Technology (GRIT) providing situational awareness and interference mitigation tools.

Our GPS Anti-Jam Technology (GAJT) enables users to combat intentional or unintentional jamming or interference.

Firmware and software

Firmware configurations to boost precision and reliability are standard with NovAtel GNSS receivers. Additional field upgradeable options are available to enhance performance in a number of areas.

Custom configuration

Marine users worldwide count on our technology, whether they use NovAtel branded products or integrate our technology to create their own solutions. We offer a range of options when it comes to performance, size, cost and features to meet your project requirements.



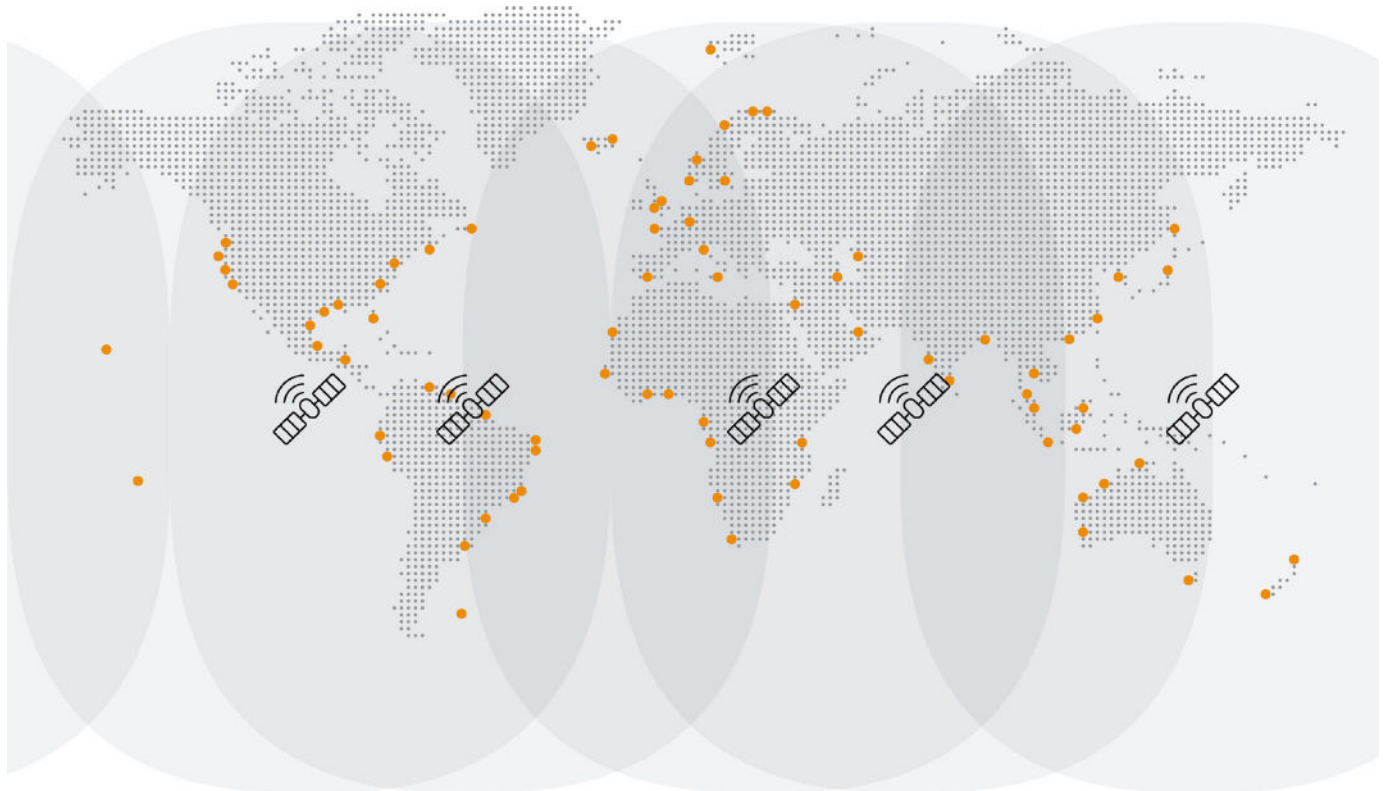
High performance, reliability and global availability



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Oceanix Correction Service

We are pioneers and global leaders in satellite-based correction services with the reliability and high availability of our Oceanix Correction Service. The robustness of the Oceanix infrastructure sets it apart from the competition – superior GNSS reference stations, redundant system architecture and continuous quality monitoring contribute to an exceptional service that is available anytime, anywhere. Oceanix transmits correction data in real-time, with minimal latency, directly to your NovAtel receiver via satellite link or Internet connection to provide a robust solution.



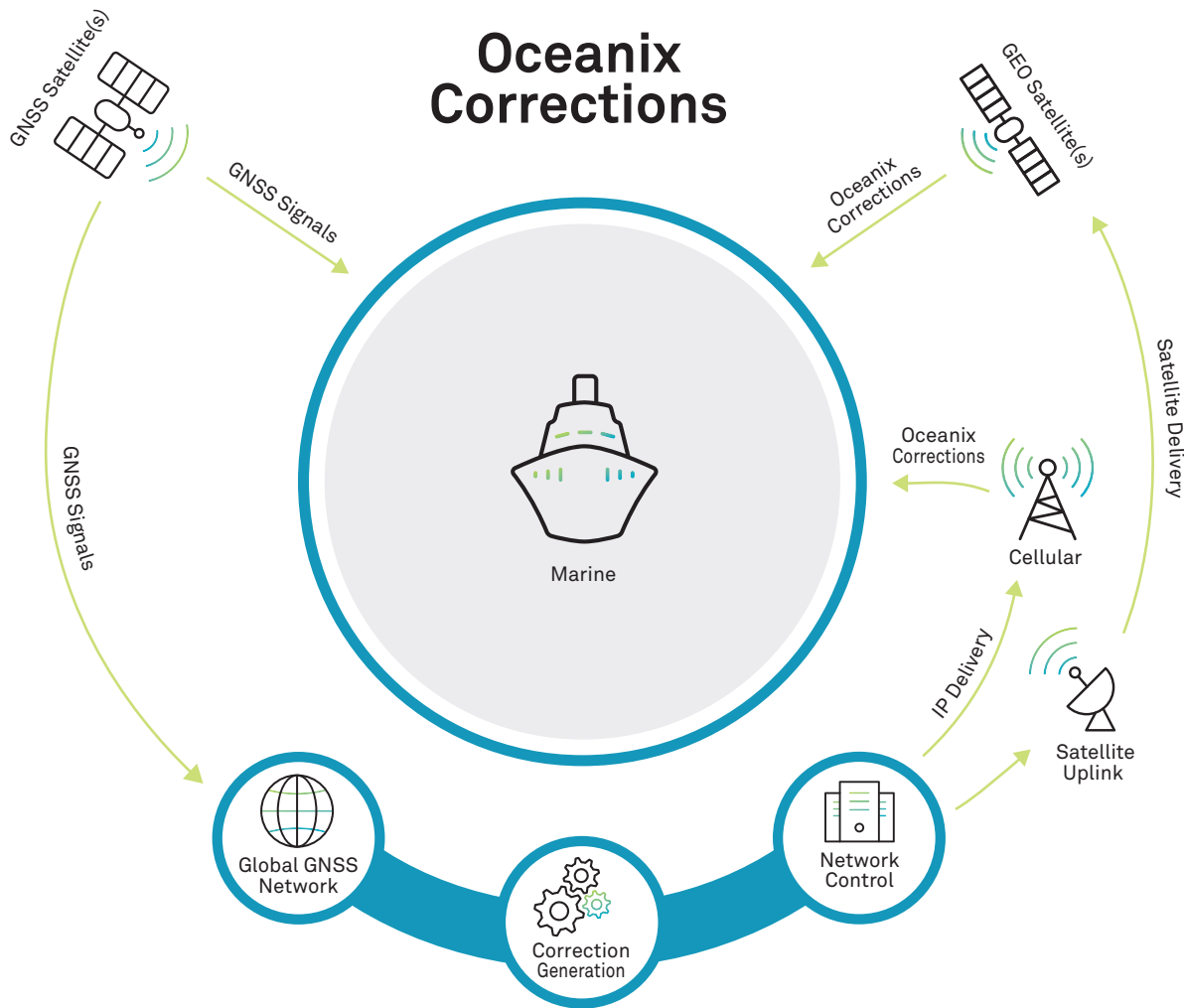
Oceanix system advantages

- Complete global coverage from 90+ independently owned and operated GNSS reference stations
- Delivers 4 cm horizontal and 6 cm vertical accuracy RMS up to 60 km offshore
- 3 geographically separated Network Control Centres ensuring over 99.999% availability
- Ownership over end-to-end correction generation process to provide industry-leading data quality
- Broadcast over 5 geostationary communication satellites for overlapping global coverage
- Corrections transmitted over a minimum of 2 beams directly your NovAtel receiver so you're never without correction data
- 24/7/365, all-weather correction services combined with NovAtel's superior GNSS receiver technology allows continuous operation even through correction outages up to 5 minutes
- Flexible subscription plans for any nearshore marine application
- Exceptional end-to-end support for entire positioning solution

Unmatched reliability and accuracy

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NovAtel is in the unique position of having control over the entire correction data generation process as well as the positioning algorithms that drive GNSS receiver performance. Combining our world-leading GNSS hardware with our robust correction service and integrated support delivers a seamlessly integrated high-performance solution. Our Oceanix Correction Service delivers high-accuracy solutions globally, enabling sub-decimetre positioning in under 20 minutes in all nearshore marine environments.



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Trusted hardware solutions

Select from a range of marine-certified antennas and receivers that deliver high-precision positioning and reliability in even the harshest conditions, including GNSS-denied environments.



GNSS precise positioning receivers

GNSS receivers from NovAtel set the standard when it comes to positioning performance, flexibility and ease of integration.



GNSS high-performance antennas

NovAtel's patented VEXXIS antenna series delivers exceptional GNSS tracking and positioning performance with triple-frequency, multi-constellation and L-Band reception.



Marine anti-jam antennas

Our GPS Anti-Jam Technology (GAJT) includes the 710MS and the low SWaP 410MS. Both are commercial off-the-shelf antennas providing situational awareness through jammer direction-finding and protecting against the threat of interference, jamming and spoofing attacks.



SPAN GNSS+INS technology inertial systems

SPAN technology integrates our industry-leading GNSS positioning with an IMU to create a deeply coupled GNSS+INS solution.



Maximise positioning performance

Everything you need from one integrated, experienced source to assure positioning and accuracy – hardware and correction services as well as software and firmware.

Waypoint post-processing software for greater accuracy

Waypoint post-processing software (GrafNav, GrafNet and Inertial Explorer) provides the ability to analyse position, velocity, heading, attitude and heave.

Inertial Explorer post-processing is a powerful, highly-configurable processing engine that ensures the best possible accuracy using all available GNSS data. It processes data in forward and reverse time with features like local base station differential processing, backward smoothing and precise satellite clock and orbit information.

ALIGN heading and relative positioning firmware

ALIGN combines two or more receivers to generate precise positioning and heading for dynamic applications. Using GPS, GLONASS and SBAS, ALIGN Heading generates high-precision heading and pitch angles between two receivers for real-time navigation.

Multi L-Band tracking

L-Band corrections are transmitted simultaneously on multiple frequencies with over 99.999% availability so you're never without correction data.

GRIT

GNSS Resilience and Integrity Technology (GRIT) is a firmware suite developed to expand situational awareness and interference mitigation tools across applications and environments to protect against GNSS interference, jamming and spoofing.

GNSS spoofing detection

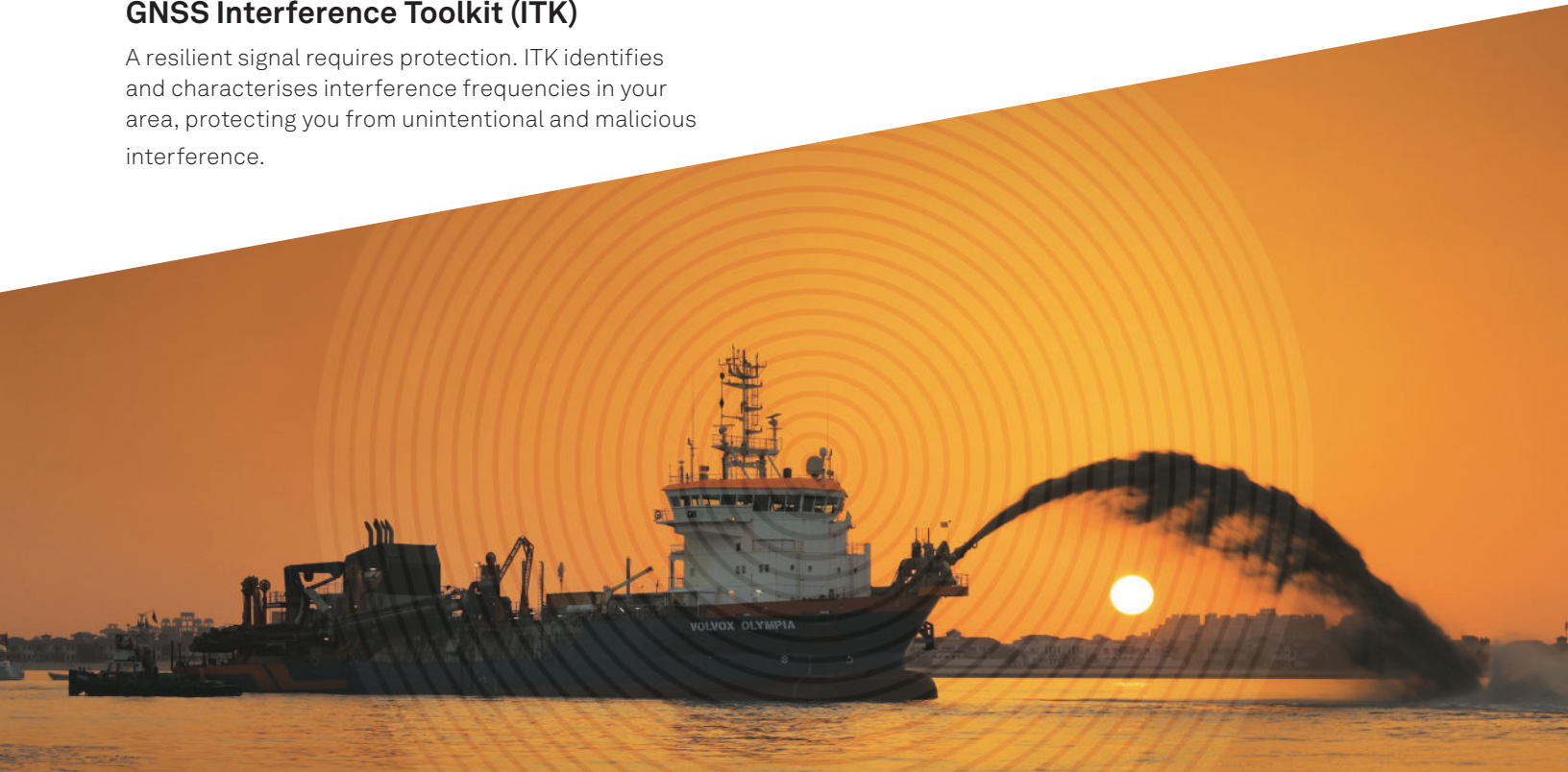
Enable spoofing detection for a comprehensive understanding of your RF environment to identify when your positioning, navigation and timing (PNT) are at risk.

GNSS Interference Toolkit (ITK)

A resilient signal requires protection. ITK identifies and characterises interference frequencies in your area, protecting you from unintentional and malicious interference.

Time-tagged digitised samples

Time-tagged snapshots of analog to digital data samples allow users to enhance situational awareness and characterise the RF environment to develop their own interference location algorithms.





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About Hexagon | NovAtel

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications. Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

NovAtel, part of Hexagon, is a global technology leader, pioneering end-to-end solutions for assured positioning for land, sea, and air. NovAtel designs, manufactures and sells high precision positioning technology developed for efficient and rapid integration. Our solutions are empowering intelligent positioning ecosystems in vital industries that depend on the ability to tackle the most complex challenges in the most demanding environments. Learn more at novatel.com.

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