exactAIS®

What is AIS?

AIS (Automatic Identification System) was designed primarily as a collision avoidance system for large class vessels. Since 2004, the International Maritime Organization (IMO) has required AIS transponders to be aboard all vessels that exceed 300 gross tons. Over 130,000 ships worldwide have installed these transponders at a combined cost of several hundred million dollars, making AIS one of the most successful maritime technology deployments of all time. Additionally, AIS technology is increasingly being deployed in smaller vessels as well as Aids-To-Navigation (AtoN) and Search and Rescue (SAR) transponders.

While AIS has been deployed successfully, it suffers from a major limitation in that, due to the curvature of the Earth, its range is limited to approximately 20-30 nautical miles. Maritime agencies wish to gain greater visibility into vessel traffic over a much broader area in order to enhance their operational effectiveness. exactEarth believes the answer lies in collecting AIS transmissions from space.

The exactAIS Solution

exactAIS provides a global capability for monitoring all AIS-equipped vessels using our own satellite constellation and global network of ground stations. As we receive AIS messages at our data processing centre in Canada, we forward these messages instantly to our customers via a secure internet link. The messages are provided in one of several industry standard formats that are compatible with existing AIS display systems. exactAIS streams the data securely, quickly and continuously, enabling you to monitor any area of the planet for vessel traffic like never before. We process and distribute all received AIS messages in your Area of Interest (AOI) providing you with MMSI, Ship Location, Ship Course and Ship Speed. All data is also time-stamped and provided with each message.

In addition to complete global coverage, exactAIS detects many times more vessels than any other system, capturing thousands of distinct vessels in a single pass. Utilizing our patented processing technology, we are able to provide our customers with better information allowing you to make better decisions for security, traffic management, environmental and safety applications.
The exactEarth Advantage

AIS, being an RF-based communications system, was never designed for reception of signals from space, however exactAIS greatly extends the range of the original system and creates many new application possibilities for competent maritime authorities. Visibility scope is significantly enhanced using exactAIS, creating increased maritime situational awareness beyond the 30 nautical mile range from shore. exactEarth has developed a unique technology which can collect, process, distribute and archive AIS messages received from ships all over the globe using a global satellite system and a patented advanced Satellite AIS detection technology.

exactAIS is a global vessel monitoring and tracking service based on this world leading Satellite AIS detection technology. It enhances maritime domain awareness for government authorities and selected commercial organizations around the world, with superior detection capability, secure distribution of information and unparalleled quality of service.

Unlike other Satellite AIS providers, exactEarth provides a full range of services to enhance the value of exactAIS, such as in-house expert software teams, customized information feeds, global sales and support organization, and a 24/7 monitored Operations Centre.

What Does This Mean to our Customers?

It means that you get the complete picture when it comes to understanding global maritime traffic and the information you need as quickly as possible to make critical maritime operational decisions faster.

Our system provides both the best in class detection rate in the industry and meets the quality requirements of our customers, ensuring that data reaches you in a highly secure, integrable and timely way.