

Frequently Asked Questions

TSD NAUTICAL SENTRY

TSD Nautical Sentry is a new and improved version of Tideland Signal's Display system, so if you're curious about TSD Nautical Sentry and how it works we have some answers for you.

Q. What is TSD Nautical Sentry?

A. TSD Nautical Sentry is a web based AtoN and Vessel Monitoring service that can be accessed by any computer or tablet. What makes this product so special is that any AtoN connected to a base station can be monitored for functionality in real time and can relay message 6, 8, and 21 along with advanced Met/Hydro data. TSD Nautical sentry also doesn't just monitor AtoNs it also can track vessels speed, bearing, location and routes up to 30 days.

Monitoring and providing safe waterways around ports, harbors, wind farms, or oil rigs is extremely important which is why the software was created to also provide:

- Creation of synthetic and virtual AtoNs so that you can create events and warning areas to protect your structure as well as incoming vessels.
- Message vessels directly using the software for alerts and warnings.
- Create events to track AtoNs and Vessels for your desired cause.
- Replay activity of AtoNs and vessels up to 30 days. (activity after 30 days can be accessed with notice)
- Create and export reports based on vessel traffic, AtoN activity and events or a multitude of other reports that may be of service. (an advanced explanation of reports can be found further into this FAQ)

Due to TSD Nautical sentry being a web based service, site maintenance and updates are always ongoing. Tech service is provided to you and the service can be updated for better features in different versions depending on your needs.



Q. What makes it different from the previous TSD?

A.

1. This version of TSD Nautical Sentry is web based and doesn't have any applications or physical hardware that needs to be installed on a computer or tablet.
2. All data is backed up in the cloud and can be quickly accessed with up to 30 days of reports, events, replays, or tracking. (data can be accessed after 30 days, but a support ticket needs to be issued)
3. With one license purchase 5 users can access the program and customize their display to their liking.
4. Display of Met/Hydro or Dredging data.
5. More advanced filtering, event creation, shape creation, and reporting options.

Q. What are the features and benefits of using this system?

A. Benefits:

- Web based with access to 5 users with the purchase of 1 license.
- Cloud based and encrypted for your data protection.
- Continuous updates and improvements based on customer feedback.
- Online tech support and training.
- Can be connected to multiple AIS base Stations (no limit on base stations or AIS units)
- Provides 2 way communication for you to send and receive messages.

Features:

- Real time display of AIS Data Via the web.
- AtoN remote monitoring for lantern status, battery voltage, sunset switch, and Met/Hydro Data.
- Can track and monitor vessels equipped with AIS for distance, bearing, speed, route and location.
- Virtual/Synthetic AIS AtoN creation.
- Intellegent event and warning area detection and alerting.
- Customizable interface with zooms, shapes and filters to manage the AtoNs and tracking displays.
- Messages including 6,8,21 can be sent via email or SMS.
- Advanced recording and replay features.
- Advanced reporting tools and reports depending on the client's needs.

Q. Who can benefit from TSD Nautical Sentry and why would they use it?

A. Senior staff, regular staff and crews that oversee & work in/on Ports, Harbors, Oil Rigs, and Wind Farms.

For the use on Oil Rigs and Wind Farms:

- Advanced filtering and event creation allows you to actively protect your oil rig and wind farms to warn and alert you too vessels entering the area.
- Can track vessel speed, distance and bearing.
- Monitor the AtoNs surrounding your Oil Rig or Wind Farm with alerts or failures along with Met/Hydro functionality.
- Send messages to oncoming vessels.
- Create reports based on the activities around your structure including vessel tracking, AtoN management, watchdog event reporting, etc.

For the use in Ports and Harbors:

- Actively track vessels entering your port by monitoring a vessels speed, bearing, and position to effectively guide them into the port or harbor.
- Monitor the AtoNs surrounding your port with alerts or failures along with Met/Hydro functionality.
- Creation of events and synthetic AtoNs to notify vessels entering the port of obstructions or other warning areas.
- Send messages to oncoming vessels.
- Advanced recording and replay features of AtoNs and vessels within your port.
- Create reports depending on your port or harbors needs for vessels, AtoNs or events.

For Senior Staff:

- The ability to track and monitor vessels entering or around your port, harbor, oil rig or wind farm; including speed, bearing, and position
- Ability to monitor all AtoNs within range of base stations. The number of base stations and AtoNs doesn't matter.
- Can monitor Met/hydro data.
- Creation of events and synthetic AtoNs to notify vessels entering the area of obstructions or other warning areas when an appropriate base station is used.
- Cloud based and encrypted for your data protection.
- Automatic updates of the system.
- 5 users can access the system with their own personal dashboard.

For Regular Staff and Crew:

- Ability to monitor all AtoNs within range of base stations. The number of base stations and AtoNs doesn't matter.
- Advanced recording and replay features of AtoNs and vessels within your port.
- Advanced filtering and event creation along with reports.
- Report creation for vessel tracking, AtoN monitoring, events, etc.
- Online training and support is provided for users.

Q. What is different about the TSD Nautical Sentry compared to other AIS Display systems on the market?

A. One of the key differentiators from others on the market is the real time access to AIS units and vessels using a web based browser. Data can be accessed anytime from anywhere using a computer or tablet with access to the web. For competitors that also have a web based platform what makes TSD nautical sentry stand out is:

1. There is no limit to the amount of AtoNs or base stations that can be displayed or accessed.
2. Up to 5 users can access an account and customize their display settings based on their needs.
3. Displays all AtoN functionality including Met/Hydro.
4. Customers can choose reporting functions based on their port, harbor, oil rig or wind farm's needs to both expedite reporting of AtoNs, vessels, or warning events & areas, this can free staff up to complete and perform different duties.
5. Continued updates and improvements based on customer requests and suggestions.

Q. What are the different reports and what do they do?

| Report Type | Description |
|-----------------------------|--|
| AtoN Detailed Overview | The AtoN detailed report provides a log of all the state changes for a particular AtoN in the system. The AtoN Overview report provides the user with an overview of the system status of all AtoNs configured in the system. A user can create a detailed report on each AtoN or a summary report of all the AtoNs the client is responsible for. |
| Watchdog Events | The Watchdog Events report allows the user to generate a list of all the Events that have been triggered in a given time frame. The user can select one or several Events to plot and export. Watchdog Events can be configured to deliver real-time alerts via e-mail, SMS or AIS message. The report is of value if the user requires a summary of the events that have been triggered in the past (e.g. on a weekly basis). |
| Area | The Area report enables users to create statistics based on vessel traffic in a specific area. Includes Details such as when the vessel entered and exited the area, plus the distance traveled within the area, can also calculate the average duration vessels were in anchorage areas outside the port. |
| Historical Tracking | Historical Tracks enables users to generate graphs displaying AIS tracks within a specific time frame and a specific geographical area. The report can provide insight as to where certain vessel types, drafts, speed ranges transit in a particular area. Can also generate SOG graphs of the selected tracks. |
| Passageline | The Passageline report enables users to create statistics based on vessel traffic crossing a specific passageline. An example report could be summarizing the number of cargo vessels entering the port in April 2019. |
| Port Calls | The Port Calls report enables users to generate a list of all Port Calls in a specific area or worldwide from a specific list of vessels. A user may be interested in seeing what ports a particular vessel may made calls to in the past six months. |
| Density | The Density report enables users to generate overlays displaying the density of vessel traffic within a given area of the chart. Used for traffic pattern analysis. |
| Historical Trips | The Historical Trip report enables users to generate graphs displaying completed vessel trips within a specific time frame and a specific geographical area. A trip is defined as a vessel leaving a port (or area) and entering the same or a new port (or area). |
| Passage Line Ships | The Passagelines Ships report allows the user to generate a list of all the ships passing any number of passagelines in a particular order. This list includes the time of first and last passage, direction of passage, along with several AIS properties of the target at the time it passed the lines. Used to determine transit times of vessels between the passage lines. |
| SOG Distribution | The SOG Distribution report enables you to create distribution data and graphs based on the Speed Over Ground as reported by the ship AIS transponders. This report can also calculate time running, time stopped, % time running and distance travelled. |
| Near Miss Ship - to - Point | The Near Miss Ship to Point report allows the user to generate a list of all the AIS targets that have been within a certain distance of a given point. A coordinate is either entered manually, or chosen using the geographical point selector tool. |
| Near Miss Ship - to - Ship | The Near Miss Ship to Ship report allows the user to generate a list of all the AIS targets that have been within a certain distance of another AIS target. |
| Video Replay Report | The Replay Video report allows the user to create a video file showing the movement of all ships, or selected ships, inside an area for a given time period. Can be utilized for incident investigation, training purposes. |
| Ship Report | The Ships report allows the user to create a report of the tracking of one or more particular ships for a particular time period. A Ships report shows the location where important events (got/lost AIS signal, changed static or voyage data) for the ship has occurred on a map. Most appropriate for security applications (e.g. is a vessel turning of its transponder, changing its name etc.) |
| CSV Data Export | The CSV data export allows the user to export AIS data as a ZIP compressed file of comma separated values (CSV). Applicable for those organizations that want to perform their own analysis on particular components of the AIS data. |

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Q. What do I need to install the system?

A. A computer or tablet that can support the latest versions of: Chrome, Firefox, Safari and Edge.

Q. How is the system maintained?

A. Data is stored up to 30 days on cloud based servers. Access to data over thirty days may take a support ticket. All maintenance and updates are handled by Tideland Signal & Gatehouse Maritime and is automatic, all the user needs to do is log into the program.

Q. How do I use it and log in?

A. Access to the web browser is supplied on purchase and up to 5 users can access the system. Any user can access the program with an internet connection.

Q. How does the display software work?

A. TSD Nautical sentry receives and sends messages to AIS transponders. All AtoNs with AIS units within your network can be viewed, that includes vessels within your area. The standard chart is OSM (Open Street Map) and it shows the map of the entire globe. The second Map is S-57 (Standard Electronic Navigational Chart) S-57 however can be customized and preloaded if the customer has a template available.

Q. What if I already have units equipped with GPS or Satellite and don't need new ones?

A. TSD Nautical Sentry is used to Monitor and send messages to AtoN units equipped with AIS and comes with GPS and SRM capabilities, but If you wish to only receive information from your AtoN units such as:

- Functionality
- Failure
- Light status

Tideland Signal provides a program called TSCtrack.com that will do this for a moderate monthly fee (Contact sales representative for more details)

Q. Is the product available in different languages?

A. TSD Nautical Sentry is available in Danish, English, Spanish, Turkish, and Chinese. Additional languages are currently being updated and will be available in later versions.

Q. When will the TSD Nautical Sentry be available?

A. TSD Nautical Sentry is currently available for purchase please contact a Tideland Signal Sales representative.



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