

Pole Star's Marine Asset Tracker (MAT) offers a choice of SkyWave satellite transceivers linked to a web-based service, providing a highly effective way of automatically tracking powered and unpowered assets.

With a choice of three dedicated hardware options linked to a stand-alone system, MAT provides a reliable, low-maintenance tracking solution for a range of marine assets, including tugs and barges, support vessels, oil and gas rigs.

Whether for a tug and barge requiring routine tracking, a support vessel entering a high risk area or a rig in transit or unpowered in extreme weather conditions, MAT enables the user to monitor the safe passage of each asset in their fleet on one screen.

Each hardware option has been developed to suit specific vessel and market sector requirements in terms of power supply, battery type/duration and position reporting frequency. All options share the benefits of Pole Star's web-based MAT service.

Key Benefits

- View fleet on interactive C-Map[™] charts
- · Display Fleet List for latest data on entire fleet
- · Receive position reports by email and SMS
- Poll a vessel to receive an immediate position report (specified hardware options)
- Create geo-zones and receive notifications as assets enter or leave
- · Track history for voyage analysis
- Global weather forecasting and meteorological information
- Credit-based payment system enables full user control
- Online usage report gives up-to-date account status

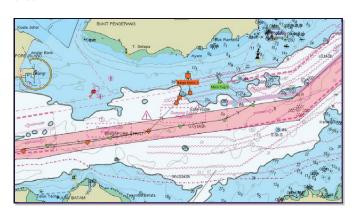


Track history

MAT provides an essential tool for analyzing actual progress of a vessel against its planned schedule (shown below). You can display the voyage history for a selected vessel and click on an individual icon along the trail to display the associated position report.

Geo-zones

MAT allows you to create a geo-zone to define and display a specific area. You can then program the MAT system to alert you by email/SMS, should a position report be transmitted when the vessel enters or leaves the defined area.

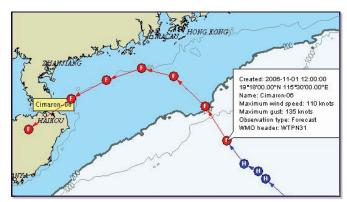


Variable position reporting

With MAT1 and MAT5, you can change the reporting interval and poll a vessel to request an immediate position report. These features enable you to have accurate and updated information on a vessel, for example in the event of bad weather being forecast or a geo-zone notification received.

Monitoring weather and sea conditions

MAT provides a 10 day weather forecast with a choice of meteorological parameters that can be overlaid as graphics on the C-Map charts.



A further option is the provision of cyclone information giving both forecast and historical data.

Budget Management

Pole Star's credit based payment system is the key to ensuring you remain in full control of your Marine Asset Tracker account.

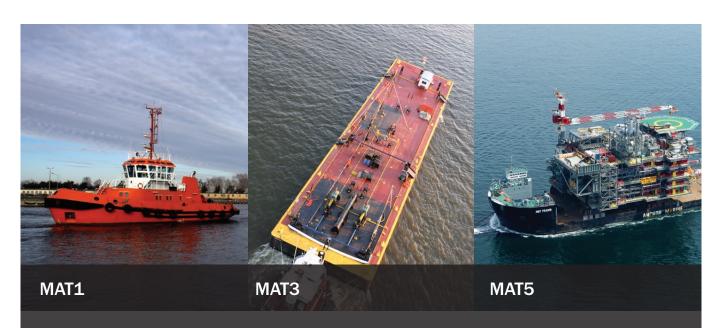
Online reports track costs and give current account status for fleet and for individual vessels, so that analysis of per vessel cost/usage and rebilling, where appropriate, is straightforward.

Hardware options

The MAT range of hardware enables the user to select the transceiver unit that meets their specific operational requirements.

* In event of a power failure

HARDWARE	VESSEL TYPE	BATTERY TYPE	BATTERY DURATION	VARIABLE POSITION REPORTS	POLL FOR POSITION
MAT1	Powered	n/a	n/a	Yes	Yes
МАТЗ	Unpowered	Integral	12 months	No: Fixed - every 6 hours	No
MAT5	Powered	* Plus integral & external back up + charger	* 14 days	Yes	Yes



For powered vessels with stable power supply eg tugs and support vessels, MAT1 is the recommended option. Ideal for both routine tracking and, with its variable reporting capability, monitoring vessels transiting high risk areas.

For unpowered vessels eg barges, "dead" tows, unattended installations, MAT3 provides a low-cost, low-maintenance option with position reporting fixed at four times per day. The unit's non-rechargeable battery guarantees 12 months uninterrupted reporting.

Designed specifically for Rig/
Platform Monitoring Management,
MAT5 uses the onboard power
supply to charge the internal
battery and power the unit in
normal operating conditions.
Should the rig experience
extreme weather conditions or be
transported to a different location,
causing the existing onboard
power supply to be disrupted, the
internal and external batteries will
continue to power the unit for a
further 14 days.

MAT TYPE

1 EATONE DECOMINED				
PRICING		1	3	5
Registration	One-off fee for registering a transceiver on the MAT system billed in credits	✓	√	√
Pay as you go	Credits system allows for flexible usage	√	✓	✓

DESCRIPTION

HARDWARE OPTIONS					
External power pack	Battery pack to extend time between recharges by 7 days			✓	
Battery charger	Battery charger for charging unit				
Integral power pack	Replaceable internal power pack		✓		

CHARTS				
Fleet List	Latest position report data and map for each vessel	✓	✓	✓
Interactive Fleet Map	Shows the position of fleet on C-Map™ charts with zoom and pan	✓	✓	✓
Weather information	10 day meteorological forecast and cyclone information	✓	✓	✓
Geo-zones	Set and display your own zones	✓	√	✓

POSITION REPORTING*				
Automatic Position Report (APR)	A position report sent automatically at a fixed interval	✓	✓	✓
Change reporting interval	Send a command to change the interval between automatic position reports	✓		√
Request a position report (poll)	Send a command to request an immediate position report	✓		✓
Overdue position reports	Receive a warning if a vessel has not reported	✓	✓	✓
Monthly battery report	Full diagnostic check of battery condition			✓
Position report history	View and download a log of all position reports	✓	✓	✓
Enter position	Manually enter position reports	✓	√	✓

TOOLS				
Postings Manually enter extra information to be displayed in a posit report		√	✓	✓
Email notifications	Send position reports to an unlimited number of email addresses	√	✓	✓
SMS notifications	Send position reports to up to 3 phone numbers by SMS	✓	✓	✓
Geo-zone notifications	Alert when vessel reports a position in or out of a user defined zone	√	√	√

USERS				
Master user	A username and password with full control of the service	✓	✓	✓
Standard users	Ability to create up to 10 Standard logins to access specific parts of the fleet eg by superintendent or type of vessel	√	√	✓

^{*}Pole Star will use reasonable endeavours to track your transceiver and deliver your position reports. However, sometimes this is not possible due to factors beyond our control, such as satellite communications failure.

FEATURE