

MTA300

Operates on the VHF band

The MTA 300 AIS Base Station is a VHF maritime system designed specifically for coastal surveillance, vessel traffic monitoring and management at ports. The MTA 300 facilitates safe navigation of ships, helps to protect the marine environment and supports the VTS NET operation. Moreover, the effective processing of AIS information contributes significantly to the security of port and offshore installations.

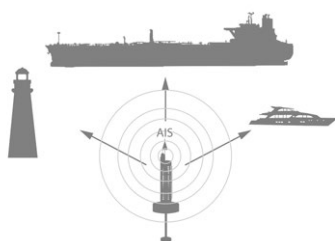
It can operate as a standalone solution or in an AIS network

Easily configured to the specific needs of any customer, MSM AIS Base Station can operate as a standalone solution or in an AIS network.

Management of multiple reports

It allows the management of multiple reports (identification, position, course, speed over the ground, etc) and high-update frequency, based on SOTDMA technology (Self Organization Time Division Multiple Access).

The MTA 300 meets with IALA Recommendation on AIS (A-124 Recommendation), IEC and ITU Standards.



FEATURES

- Automatic vessel identification (Name, IMO number, MMSI and Callsign).
- Provides all the features required for extended vessel traffic surveillance.
- Reception of messages on coordinates, course, speed over the ground, heading, ship type, route plan, availability of dangerous cargo, etc.
- Reception of static and dynamic data and binary messages.
- Reception and transmission of text messages relating to maritime security.
- Reception of differential GNSS (GPS) corrections from the GNSS reference station or radio beacon data link and their transmission via AIS channel.
- Low power consumption and alternative power sources drastically limit the need for infrastructure investments.
- Can be equipped with dual antennas Tx/Rx.
- Assignment of appropriate operating modes to the vessel stations including the assignment of areas, frequencies, radiation power, slots, interval reports, and number of report.
- Capable to generate virtual or synthetic AIS AtoN (up to 20).

MTA300

TECHNICAL SPECIFICATIONS

Input voltage:	100-240V c.a., 50,60 Hz and 7 or +24V c.c.
Power consumption:	Idle 15W, Nominal 25W, Max. 40W.
Transmitter output power (adjustable):	12.5W/1W, 50 Ohm load.
Receiver sensitivity 20% MER:	<-107 dBm.
Bandwidth:	25 kHz.
Protocol:	TDMA (AIS).
Baud rate:	9600 bps (AIS) 71200 bps (DSC).
Modulation:	GMSK (AIS)/ FSK (DSC).
Frequencies:	156.025 MHz-162.025 MHz.
Default channels:	87B (161.975 MHz). 88B (162.025 MHz). 70 (156.525 MHz).
GPS:	L1, 16 parallel channels.
DGNSS support:	NMEA via RJ 45 Ethernet.

VTS NET

The VTS NET application has as main function the display of AIS transponder-equipped stations (aids to navigation, vessels, etc.) on a map.

For that purpose, it requires interaction with AIS Base Stations with which exchange the AIS messages coming from transponders, generate virtual AtoN or send messages to the vessels.

AIS targets are displayed on a map with different cartographic layers to represent land (Google Earth) and sea (Electronic Nautical Charts), showing an intuitive and user-friendly interface.

INTERFACES

VHF antenna (combined Tx/Rx):	N female, 50 Ohm.
VHF antenna (separate Tx and Rx):	Optional: N female, 50 Ohm.
GPS antenna:	TNC female, 50 Ohm.

STANDARDS

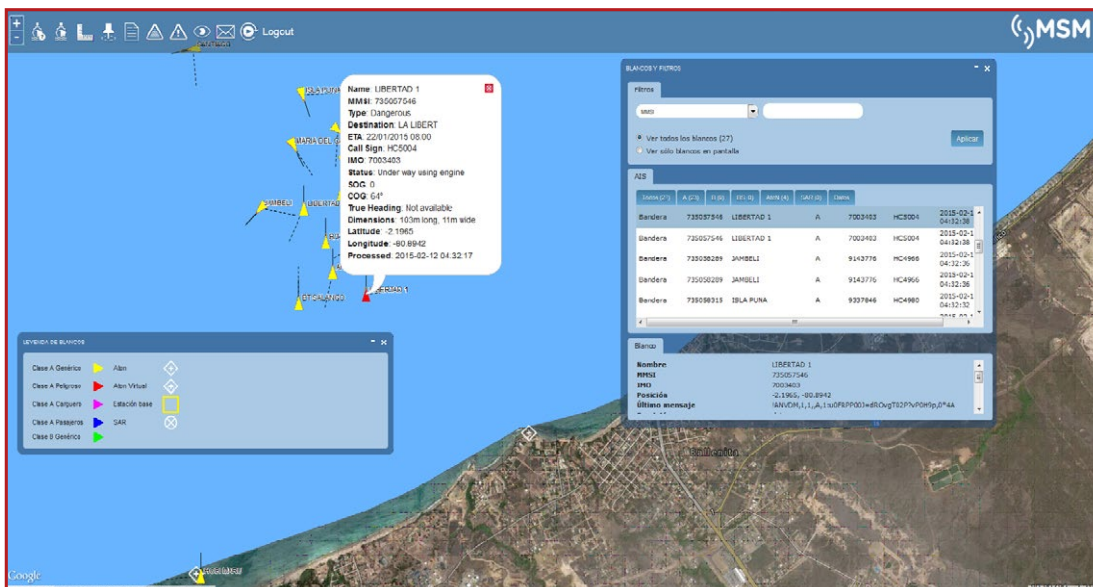
A-124 IALA Recommendation.	ITU-R M.1371-4.
IEC 62320-1.	ITU-R M.1084-4.
IEC 62320-2.	R&TTE Directive 1999/5/EC.
IEC 61993-2.	EN 60950.
IEC 61162-1,2.	IPC-A-610 (manufacturing).
IEC 61108-1.	RTCA/DO-178B (SW development).

OPTIONS

- Repeater base station.
- Limited base station.
- AtoN base station.

VTS NET APPLICATIONS AND MENUS AVAILABLE

Target and filter feedback.	AIS AtoN management.
Measurement on the chart.	AIS Base Station.
Areas.	Messaging System.
Display of rules.	Historical reports.
Alarms and active alarms.	General configuration.
Views.	



Display of data received from the MTA 300 AIS Base Station by means VTS NET Software.

! Specifications subject to change without previous notice.

