



Tideland Maritime Systems

AIS Solutions for AtoN (V-Track AtoN)

V-Track AtoN is specifically designed for use on all AtoN's by the world leader in Aids to Marine Navigation, Tideland Signal Corporation.

Port and Navigational Authorities around the world are recognizing the advantages of fitting Automatic Identification System (AIS) units on Aids to Marine Navigation (AtoN) equipment. IMO's mandatory requirement of fitting AIS on all SOLAS vessels before December 31, 2004 has accelerated the need to fit AIS on AtoN's (buoys, beacons, light ships and lighthouses).

Tideland Maritime Systems has adopted The International Association of Lighthouse Authorities (IALA) recommendations describing the functions and message structure contained within the AIS AtoN message.

V-Track AIS on AtoN's provides a number of advantages to both the AtoN authority and shipping community:

- Accurate position of the AtoN and important light information such as name and position is broadcast
- Broadcast weather and sea condition data on Message number (8) or as a text message on Message number (6) when connected to metrological and hydrological sensors
- Marking or delineating Tracks, Routes, Areas, and Limits (for example areas to be avoided and traffic separation schemes)
- Automated alarms warn mariners if a buoy is off-station
- Will be displayed graphically on any AIS compliant chart display or radar
- Marking and identifying of offshore structures (for example wind energy sites, oil or gas platforms)
- Capability of remote monitoring
- Uses less than 2 Ah/day when broadcasting at the IALA recommended rate



Standard configuration of Tideland lantern fitted with a MicroPower OMNIBUS II flasher lampchanger, AIS unit in waterproof container and GPS antenna.

The compact unit is housed in a rugged waterproof enclosure and designed for use on any AtoN. It is particularly beneficial for use with a Tideland Signal, MicroPower OMNIBUS II, flasher lampchanger, as no other external sensors are required. For other manufacturers lights, sensors may be needed to provide data to the V-Track AtoN unit.

With a power consumption of less than 2Ah/day the V-Track AtoN is suitable on all solar installations, including buoys anywhere in the world. The input voltage of 9V to 36V DC is compatible with most known AtoN power systems.

In addition to supplying AtoN information, V-Track AtoN can:

- Be integrated into a port or coastal AIS network using Tideland Maritime's AIS network software
- V-Track AtoN is also capable of full integration into the NavLink remote monitoring and control system for all aids to marine navigation



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SPECIFICATIONS

Size	11 x 12.75 x 4.5 inches deep 280 x 324 x 115mm deep
Weight	15lbs (6.8kg)
Protection	IP 66
Power Consumption	<2Ah/day
Operating Voltage	9V to 36V DC
Cable Entry	4
Enclosure material	Stainless Steel
Solar Panel Compliant	Yes
Fitted to Tideland flasher lampchanger	Standard
Remote Monitoring	Optional
Broadcast Sea and weather Conditions	Optional
Fitted to other lanterns with external sensors	Optional
Color	Self colored
Mounting	4 x 3/8" (10 mm) Bolts
Mounting Brackets	Optional (custom designed)
VHF Antenna	Supplied
GPS Antenna	Supplied
Range	Dependent upon Height of Antenna > 5 nm

Contents of transmitted message (21)

- MMSI Number
- Name of the aid to navigation
- Position
- Position accuracy indicator
- RAIM indicator
- Type of position fixing device
- Time stamp
- Dimension of the aid to navigation and reference positions
- Type of aid to navigation
- Virtual aid to navigation target flag
- 8 bits reserved for use by the regional/local authority (can include the technical status of the aid to navigation – remote monitoring)



AIS fitted to a Tideland Signal SB-138P buoy complete with weather monitoring equipment during sea trials

TIDELAND SIGNAL CORPORATION
CORPORATE HEADQUARTERS
P.O. Box 52430, Houston, TX 77052-2430, USA

Tel: +1 713 681 6101
Fax: +1 713 681 6233
E-Mail: hq@tidelandsignal.com

TIDELAND SIGNAL CANADA LTD. - Vancouver, BC, Canada

Tel: +1 604 247 0988
Fax: +1 604 247 0987
E-mail: sales@tidelandsignalcanada.com

TIDELAND SIGNAL LIMITED - Burgess Hill, Surrey, UK

Tel: +44 (0) 1444 872240
Fax: +44 (0) 1444 872241
E-mail: sales@tidelandsignal.ltd.uk

TIDELAND SIGNAL PTE. LTD. - Singapore

Tel: +65 6333 0078
Fax: +65 6333 0079
E-mail: sales@tidelandsignal.com.sg