

V-Track™

V10 INFORMER™

V-Track™ V10 Informer™ is an AIS information provider and remote monitoring system for use on marine aids to navigation (AtoN) and other structures. The V10 Informer™ is available in two options: "Type 1" is a transmit only device, and "Type 3" is a transmit and receive device that can also be used as an AIS repeater. For most applications a transmit only device provides the ideal AIS AtoN solution.

The V10 Informer™ is a compact unit housed in a rugged environmental enclosure for use on any AtoN. With a power consumption of less than 0.5 Ah/day, the V10 Informer™ is suitable for all solar installations, including buoys anywhere in the world.

Tideland Signal has adopted the emerging IEC standards defining the functions and message structure contained within the AIS AtoN message. The V10 Informer™ is designed to comply with IEC and ITU requirements and also IALA recommendations. It is BSH approved.

In addition, both the V10 Informer™ "Type 1" and "Type 3" have optional remote monitoring capabilities. It is capable of remote monitoring almost any manufacturer's AtoN. When monitoring a Tideland Signal lantern the standard system provides: lantern status, battery voltage (loaded and unloaded) and an extra available input.

The V10 Informer™ broadcasts AtoN message 21 and also allows broadcasting of weather and sea data on message 6 or 8 as a Binary Message or as a Text Message on message 12 or 14. Remote monitoring information is broadcast on message 6.

Characteristics

- **PROGRAMMING SOFTWARE** - The V10 Informer™ is supplied with a comprehensive software application that enables you to program the unit via an RS232 interface.
- **REPEATER OPTION** - The V10 Informer™ "Type 3" has the capability of repeating the standard supported AIS AtoN messages for predetermined MMSI numbers. In its "Type 3" option, the V10 informer™ can also be controlled over the VHF data link (VDL). This is all possible through the configuration software.



- **VIRTUAL AND SYNTHETIC AtoN** - There are situations that require the authorities in charge to create either virtual or synthetic aids to navigation using their existing AIS infrastructure. For these cases, the V10 Informer™ is ideal as it supports both virtual and synthetic AtoN.



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Technical Details

IP Rating	IPx6 and IPx7
Designation	Automatic Identification System (AIS) for AtoN
Power Supply Type 1 Power Consumption Type 3 Power Consumption	12VDC nominal FATDMA < 0.288Ah/day* FATDMA < 0.432Ah/day* RATMDA < 1.656Ah/day* * At 12.5W, reporting interval 3 minutes
Temperature Range	-25° C to +55° C
Message 21 Content	MMSI Number, Name of AtoN, Position, Position Accuracy, RAIM Indicator Type of Position Fixing Device, Time Stamp, Dimension of AtoN, Type of AtoN Virtual AtoN Target Flag, 8 bits reserved for regional application
Standard Compliance	IEC 60945 Ed. 4 (2002-05), IEC 61162-1 Ed. 3 (2007-04), IEC 62320-2 Ed. 1 (2008-03), IEC 61108-1 Ed. 2 (2003-07), IEC 61108-2 Ed.1(1998-06), ITU-R M. 1371-4 (2010-04), IALA A-126 Ed. 1.4 (2008-06)
Transmitter Performance TX Frequency Range Frequency Accuracy Channel Space Channel Protection Modulation Data Rate TX Power Control Carrier Power Error Nominal Impedance	156.025MHz to 162.025MHz in 25kHz steps ±500Hz 25kHz 1 sec max on air GMSK / FM 9,600 bps 2/5/12.5W (programmable) ± 1.5 dB (normal) 5 50 Ω
Receiver Performance (Type 3 Only) Number of Receivers RX Frequency Range Sensitivity Data Rate PER CO-Channel Rejection Adjacent Channel Rejection Nominal Impedance	2 156.025MHz PER 20% at -107dBm 9,600 bps 2% at -107dBm 10dB at 1kHz offset 70dB at 25kHz 50 Ω
GPS Receiver Receiving Channels Tracking & Navigation Sensitivity Reacquisition Sensitivity Horizontal Position Receiver Type	50 channels ≥ -159dBm ≥ -159dBm < 2.5 m Autonomous < 2.0 m SBAS SBAS: WAS, GAGAN, EGNOS, MSAS
Environmental Product Category Operating Temperature Storage Temperature Humidity	IEC 60945 "Protected" -20C - +550C -30C - +700C 95% relative humidity at 400C
Input/Output	1-One RS-232 port for configuration, 2-One RS-232 port (optional), 3-One isolated control output-N.C. relay for alarm indication (default) or other control usages, 4-One isolated status input channel with 5 mA constant current sink for external device status input (e.g. read light fault, light on/off, etc.), 5-Four ADC channels for external sensors, 6-1 pps from internal GPS
Connector	1-VHF connector (M type) 2-GPS connector (TNC type)
Physical Width Height Depth Weight	140mm 155mm 60mm ≤ 1.5kg
Case Material	Aluminium Alloy

NOTE: Specifications are subject to change.



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