

L-3 AR Maritime Products

PROTEC ATO N AIS



The L-3 PROTEC Aids to Navigation (AtoN) AIS is an IALA and IEC compliant marine aid that provides vital information to on-board navigation devices, Vessel Traffic Systems (VTS) and buoy tender services. The AtoN not only has the ability to transmit meteorological and hydrological data when interfaced to sensors, but it can also help prevent collisions by transmitting the position of a floating AtoN and provide off-position status. L-3 offers a full range of AtoN devices from transmit only configurations (IEC Type 1) to dual receiver/transmit (IEC Type 3).



KEY FEATURES

- Fully compliant with IEC 62320-2, IALA A.126 and IEC 60945 (exposed)
- Low power consumption of less than 400 mAhr/day
- For use on floating or fixed AtoN's
- Supports VDL configuration and monitoring
- Provides reference points on a ship's RADAR and ECDIS
- Provides health status of the AtoN device, including battery life and light burnouts
- Supports VDL configuration and monitoring
- Designed to support chaining and RATDMA (Type 3 configuration only)
- Capable of supporting synthetic and virtual transmissions
- Type 3 units support message 7 and message 13



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PROTEC AIS ATON

PHYSICAL DIMENSIONS

Height:	134 mm (5.28 in)
Width:	127 mm (5.0 in)
Depth:	127 mm (5.0 in)
Weight:	1.6 kg (3.53 lbs)

POWER CONSUMPTION

Continuous Mode*:	At 12V DC: 170 mW (0.340 Ah per 24 hour period)
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DATA I/O

Bi-directional I/O:	(1) RS232 38.4 k BAUD
Diagnostic I/O:	(1) RS232 38.4 k BAUD

TRANSMITTER PERFORMANCE

TX Frequency Range:	156.025 - 162.025 MHz
Tuning Resolution:	25 kHz
Modulation:	GMSK
TX Power Control:	1-12.5W
TX Power Accuracy:	±0.7 dB
TX Frequency Drift:	±500 Hz
Nominal Impedance:	50 Ω
Antenna Connection:	Type N

RECEIVER PERFORMANCE

# of Receivers:	2
RX Frequency Range:	156.025 - 162.025 MHz
Tuning Resolution:	25 kHz
Dynamic Range:	≥100 dB
Co-Channel Rejection:	≥10 dB
Adj. Channel Rejection:	≥72 dB
Intermod. Rejection:	≥65 dB
In-Band Blocking:	≥86 dB
Noise Figure:	≤5 dB

*Continuous Mode: AIS AtoN reports Message 21 every 3 minutes in accordance with ITU-R M.1371

RECEIVER PERFORMANCE cont'd

Nominal Impedance:	50 Ω
Max Input:	+10 dBm (no damage)
Minimum Sensitivity:	≤-107 dBm
GPS Receiver:	16 Channel

ENVIRONMENTAL

Operating Temp Range:	-25° to +55° C
Relative Humidity:	0 to 95%

*NOTE: All Specifications Tested @ 25° C

TECHNICAL STANDARDS

IEC 60945 (exposed)
ITU 1371-3
IEC 62320-2

REGULATORY APPROVALS

BSH pending

L-3 Aviation Recorders Quality Management System is ISO 9001:2000 and AS9100:2004 Rev. B Certified

Aviation Recorders

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Aviation Recorders

L-3. Headquartered in New York City, L-3 Communications is a prime contractor in C3ISR (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance) systems, aircraft modernization and maintenance and government services. L-3 is also a leading provider of a broad range of electronic systems used on military and commercial platforms.

This technical data and software is considered as Technology Software Publicly Available (TSPA) as defined in Export Administration Regulations (EAR) Part 734.7-11.

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