

L-3 AR Maritime Products

PROTEC-S SECURE MARINE AIS



The L-3 PROTEC-S Secure Marine Automatic Identification System (AIS-S) is a collision avoidance and vessel tracking tool designed to improve the situational awareness of the command and control team while facilitating secure AIS communication between military assets. With an integrated minimum keyboard display (MKD), L-3 offers a compact solution which is highly desirable in the space constrained world of bridge electronics.



KEY FEATURES

- Position and identification information for AIS-equipped vessels
- Ability to display AIS targets on ECDIS/ECS/ARPA with detailed navigation information
- Supports text messaging between vessels and VTS
- Smallest AIS package offering in the industry
- Non-proprietary encryption method for secure position reporting
- IMO compliant to 61993-2
- Transmit power ranges 1-12.5W



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PHYSICAL DIMENSIONS

Height:	8.33 cm (3.28 inches)
Width:	16.23 cm (6.39 inches)
Depth:	18.36cm (7.23 inches)
Weight:	2.54 kg (5.6 pounds)

POWER REQUIREMENTS

Input:	12 - 24VDC
Watts:	16W average/64W peak

DATA I/O

Pilot Port:	PI/38.4k BAUD
IEC Port:	(2) RS422 (bi-directional) (1) RS232 (1) RS422 (input only)*

*RS422 (input only) at 4800 BAUD, all others
38.4k BAUD

TRANSMITTER PERFORMANCE

TX Frequency Range:	156.025 - 162.025MHz
Tuning Resolution:	12.5 kHz
Modulation:	GMSK/FSK
TX Power Control:	1-12.5W
TX Power Accuracy:	±0.7dB
TX Frequency Drift:	±500Hz
Nominal Impedance:	50Ω
Antenna Connection:	Type PL259

RECEIVER PERFORMANCE

# of Receivers:	3
RX Frequency Range:	156.025 - 162.025MHz
Tuning Resolution:	12.5kHz
Dynamic Range:	≥100dB
Co-Channel Rejection:	≥10dB
Adj. Channel Rejection:	≥72dB
Intermod. Rejection:	≥74dB
In-Band Blocking:	≥86dB
Noise Figure:	≤5dB

RECEIVER PERFORMANCE cont'd

Nominal Impedance:	50Ω
Max Input:	+10dBm (no damage)
Minimum Sensitivity:	≤-107dBm
GPS Receiver:	16 Channel
DSC Receiver:	Fixed on Channel 70

ENVIRONMENTAL

Operating Temp Range:	-15° to +55° C
Relative Humidity:	0 to 95%

NOTE: All Specifications Tested @ 25°C

TECHNICAL STANDARDS

IEC 61993-2
IEC 61162
IEC 60945
ITU 1371-3

REGULATORY APPROVALS

BSH/4613/05902/0406/06
USCG APR# 165.155/EC0735/4320357

L-3 Aviation Recorders Quality Management
System is ISO 9001:2000 and AS9 100:2004
Rev. B Certified

Aviation Recorders

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communications
Aviation Recorders

L-3. Headquartered in New York City, L-3 Communications employs over 64,000 people worldwide and is a prime contractor in aircraft modernization and maintenance, C³ISR (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance) systems and government services. L-3 is also a leading provider of high technology products, subsystems and systems. The company reported 2007 sales of \$14 billion.