

Marine Automatic Identification System

The L-3 PROTEC-M Marine Automatic Identification System (AIS-M) 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), the L-3 PROTEC-M Marine AIS offers a compact solution, which is highly desirable in the space-constrained world of bridge electronics.



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 to 12.5W
- STEDS protocol



Use of U.S. DoD imagery does not imply or constitute DoD endorsement.



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SPECIFICATIONS

PHYSICAL DIMENSIONS

Height	8.33 cm (3.28 in.)
Width	16.23 cm (6.39 in.)
Depth	18.36 cm (7.23 in.)
Weight	2.54 kg (5.6 lbs.)

POWER REQUIREMENTS

Input	12 to 24 VDC
Watts	16 W average, 64 W peak

DATA I/O

Pilot Port	(1) RS422 (bi-directional)
IEC Port	(2) RS422 (bi-directional) (3) RS422 (input only)

TRANSMITTER PERFORMANCE

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

RECEIVER PERFORMANCE

Number of Receivers	3
RX Frequency Range	156.025 to 162.025 MHz
Tuning Resolution	12.5 kHz
Dynamic Range	≥100 dB
Co-Channel Rejection	≥10 dB
Adjacent Channel Rejection	≥72 dB
Intermodulation Rejection	≥74 dB
In-Band Blocking	≥86 dB
Noise Figure	≤5 dB

RECEIVER PERFORMANCE (cont'd)

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

ENVIRONMENTAL

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

*NOTE: All specifications tested @ 25° C

TECHNICAL STANDARDS

IEC 61993-2
IEC 61162
IEC 60945
ITU 1371-4

REGULATORY APPROVALS

BSH/4613/05902/0406/06
USCG APR# 165.155/ECO735/4320357

COMPANY CERTIFICATION

L-3 Aviation Recorders Quality Management System is ISO 9001:2008 and AS9100:2009 Rev. C Certified



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