

# L-3 AR Maritime Products

## PROTEC MARINE AIS



The L-3 PROTEC Marine Automatic Identification System (AIS) is a collision avoidance tool mandated by IMO SOLAS V, to improve the situational awareness of the bridge crew while facilitating communication between vessels. 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

- Provides MMSI and other key information to radar and ECDIS Systems
- Single box design easily integrated in any electronic bridge system
- Operational over 12-24VDC
- User friendly MKD
- IMO compliant to 61933-2
- Integral pilot port on the front panel
- Internal GPS approved for back up position source



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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)**

\* Blue Switch detection or PI Interface

\*\*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

### RECEIVER PERFORMANCE cont'd

Noise Figure:	≤5dB
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 AS9100:2004 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, C<sup>3</sup>ISR (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.