

# Aviation Recorders

## PROTEC-W MARINE AIS



The L-3 PROTEC-W Marine Automatic Identification System (AIS) is a version of the Class A AIS Transponder that complies with the vessel tracking and tracing standard for inland navigation. With integrated blue sign support, the PROTEC-W offers a compact solution which can be easily installed into any bridge layout.



### KEY FEATURES

- Single box design easily integrated in any electronic bridge system
- IMO compliant to 61993-2
- Complies with the vessel tracking and tracing standard for inland navigation
- Operational over 12-24VDC
- Integrated blue sign support



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## PROTEC-W MARINE AIS

### 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 – 24VDC
Watts:	16 W average / 64 W peak

### DATA I/O

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

\* Blue Sign detection or PI Interface

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

### TRANSMITTER PERFORMANCE

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

### RECEIVER PERFORMANCE

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

### RECEIVER PERFORMANCE cont'd

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

Vessel tracking and tracing standard for inland navigation

### REGULATORY APPROVALS

Full Inland AIS approvals through WSV in Germany

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

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**communications**

**Aviation Recorders**

L-3. Headquartered in New York City, L-3 Communications 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.

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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