

# L-3 AR Maritime Products

## PROTEC-HS AIS BASE STATION



The L-3 PROTEC High Sensitivity (HS) AIS Base Station is fully compliant to all existing test standards. With an increased receiver sensitivity of  $-115\text{dBm}$ , the PROTEC-HS offers receiver performance which exceeds the international standard to offer improved tracking performance. The PROTEC-HS can also be configured for up to 100W of transmit power to improve transmission performance over a broad range of RF environments. With a built-in Ethernet device server, up to 20 clients can connect to the Base Station for AIS data retrieval, remote diagnostics and remote updating. The PROTEC-HS can be configured with embedded Base Station controller functionality to support redundant control (auto failover). The PROTEC-HS can also operate as a repeater while performing all required Base Station functionality.



### KEY FEATURES

- High-sensitivity AIS receiver
- User configurable, transmit power up to 100W
- Remote control and configuration
- Remote or local diagnostics
- Remote firmware upload
- Multi-client network support
- Separate or combined TX/RX antenna ports
- Embedded redundant control
- AIS Repeater
- DSC channel management
- Fully compliant to IEC 62320-1
- High MTBF and low MTTR



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## PROTEC-HS AIS BASE STATION

### PHYSICAL DIMENSIONS

Height:	133.35 mm (5.25 in), 3U
Width:	425.45 mm (19 in)
Depth:	406.40 mm (16 in)
Weight:	10.16 kg (22.4 lbs)

### POWER REQUIREMENTS

AC:	110 – 240V AC, 50/60 Hz
Nominal Power:	35W @ 25W transmit

### SERIAL I/O

Proprietary Diagnostics:	(2) RS232
PI Port:	(1) RS232
Sensor Input Port:	(1) RS232
GPS SC104:	(1) RS232
Baud Rate:	9.6 to 115.2 Kb

### ETHERNET I/O

# Ports:	2 or 4
# Diagnostic Connections:	10 (multi-client)
# IEC PI Connections:	10 (multi-client)

### TRANSMITTER PERFORMANCE

Frequency Range:	156.025 – 162.025 MHz
Channel Bandwidth:	25 kHz (12.5 kHz optional)
Modulation:	GMSK/FSK
Transmit Power (max):	12.5W, 25W, 50W, 100W
Power Levels:	2 (min-to-max)

### ANTENNA CONNECTIONS

Nominal Impedance:	50Ω
VHF Antenna:	Type N
GPS Antenna:	TNC

### RECEIVER PERFORMANCE

Range:	156.025 – 162.025 MHz
AIS Receivers:	2
DSC Receiver:	1 (optional)
Receiver Sensitivity:	-115 dBm

### ENVIRONMENTAL

Temp Range:	0° C to +55° C
Humidity Range:	0 to 95%

### TECHNICAL STANDARDS

IEC 62320-1; 61162; 61108-1  
ITU 1371-3, IALA A.124

### REGULATORY APPROVALS

BSH/46162/4320838/08

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 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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