

L-3 AR Maritime Products

PROTEC-HS AIS BASE STATION



The L-3 PROTEC High Sensitivity (HS) Automatic Identification System (AIS) Base Station is an enhanced version of the PROTEC AIS Base Station and offers an extended increased receiver sensitivity of -115dBm. It is fully compliant with the IEC 62320-1 test standard and is internally amplified to provide up to 100W of transmit power.



KEY FEATURES

- High Sensitivity AIS Receiver (< 20% PER at -115 dBm)
- User configurable transmit power up to 100W
- Remote diagnostics port (ethernet)
- Multi client network support
- Separate or combined TX/RX antenna ports
- Fully compliant to IEC 62320-1 (required and optional messages)
- Both network and local accessible diagnostics
- Both network and local support enabled control and configuration
- Remote firmware upload
- High MTBF and low MTTR



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PHYSICAL DIMENSIONS

Height:	133.35 mm (5.25 inches)
Width:	425.45 mm (16.75 inches)
Depth:	406.40 mm (16 inches)
Weight:	10.16 kg (22.4 pounds)

POWER REQUIREMENTS

AC:	110-240V AC, 50/60Hz
Watts:	35W (rms) average 146W (rms) peak

DATA I/O

Utility 1 & 2:	Proprietary Diagnostics
Ethernet:	10/100 Base-T
PI Port:	RS232 115.2kB (max)
Sensor Input Port:	RS232 115.2kB (max)
DGNSS Input Port:	RS232 115.2kB (max)

TRANSMITTER PERFORMANCE

TX Frequency Range:	156.025 - 162.025MHz
Tuning Resolution:	25kHz
Modulation:	GMSK/FSK
TX Power Control:	25-50W (100W optional)
Intermod. Rejection:	≥40dB
TX Power Accuracy:	±0.7dB
TX Frequency Drift:	±500Hz
Nominal Impedance:	50Ω
Antenna Connection:	Type N

RECEIVER PERFORMANCE

# of Receivers:	3
RX Frequency Range:	156.025 - 162.025MHz
Tuning Resolution:	25kHz
Minimum Sensitivity:	≤-115dBm
Co-Channel Rejection:	≥10dB
Adj. Channel Rejection:	≥72dB
Intermod. Rejection:	≥74dB
In-Band Blocking:	≥86dB

RECEIVER PERFORMANCE cont'd

Noise Figure:	≤1.9dB
Noise Floor (30kHz BW):	≤127dBm
RSSI Range:	-125<dBm<-65
RSSI Accuracy:	±2dB (relative) ±4dB (absolute)
Antenna Connection:	Type N

ENVIRONMENTAL

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

RELIABILITY

MTTR:	<1 hour
MTBF:	>100,000 hours

TECHNICAL STANDARDS

IEC 62320-1; 60945; 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 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.