The Kongsberg AIS RX610 is an AIS receiver specially designed for optimal signal reception. The AIS RX610 can receive from all AIS sources: AIS mobile stations, AIS base stations, AIS Aids to Navigation units, Search and Rescue (AIS SAR) units Man-over-Board (AIS MOB) units within the VHF coverage area. The AIS reception-only system has proven to be a valuable tool in increasing the situation awareness and the efficiency of operations and safety.

Remote configuration and operation
The AIS RX610 has an Ethernet/LAN interface, making it easy to interface the unit to other equipment or data networks. From the AIS Central Monitor Application a single AIS RX610, or a network of these, can be remotely operated and maintained. The AIS RX610 supports configuration and firmware update via a web interface.

Sensitivity
Kongsberg Seatex has also developed satellite based AIS receivers and this space-based AIS technology has strong focus on receiver sensitivity. The high sensitivity has been incorporated in the AIS RX610. The increased sensitivity exceeds the requirements in international standards and regulations, and is an incredible enhancement in terms of signal reception.
FEATURES

- Sensitivity better than -115 dBm
- SNMP v.2
- WEB interface for remote configuration and software update
- RTCM v.2.3 support for reception of DGPS corrections on LAN
- Three remotely configurable receivers (TDMA/DSC)
- USB interface for firmware update
- Transmission of virtual AtoN, implementation of a subset of IEC 62320-2 functionality
- Serial interface, data (RS-232)
- Optional combined 100 to 240 V AC and 24 V DC version
- Interface to meteorological sensors (option)
- Own position message (synthetic VDO) for map presentation

TECHNICAL SPECIFICATIONS

AIS RX610

INTERFACES

Communication ports Service and redundancy, RS-232
Message formats NMEA, LAN 100 Mbs BaseT Ethernet

RADIO MODULE

Sensitivity Better than -115 dBm
Bandwidth 25 kHz
Frequencies 156.025 to 162.025 MHz
Default Ch. 87B (161.975 MHz)
Default Ch. 88B (162.025 MHz)

WEIGHTS AND DIMENSIONS

AIS RX610 Unit 3 kg, 44 mm x 485 mm x 345 mm
AIS RX610_24 V DC Unit 3.3 kg, 44 mm x 485 mm x 345 mm
GPS antenna 0.15 kg, 230 mm x 33 mm
VHF antenna 1.0 kg, 1550 mm

POWER SPECIFICATIONS

AIS RX610 Unit 100 to 240 V AC (50 to 60 Hz)
AIS RX610_24 V DC Unit Optional combined 100 to 240 V AC and 24 V DC
Power consumption 9 W average
GPS antenna 5 V DC from AIS Unit

ENVIROMENTAL SPECIFICATIONS

Operating temperature range
AIS RX610 Units -15 to +55 °C
GPS antenna -50 to +70 °C
VHF antenna -55 to +70 °C

Humidity
AIS RX610 Units < 95 % relative, non-condensing
GPS antenna 100 %, hermetically sealed
VHF antenna 100 %, hermetically sealed

STANDARDS AND REGULATIONS (where relevant)

Electrical safety EN 60950-1
Electromagnetic compatibility EN 60945/EN 61000-6-3/6-2
Electrical interface IEC 61162-1/2
IALA recommendation A-124
Radio IEC 61993-2 (clause 15), ITU-R M. 1371-5
MTBF (hours) >100,000 (designed to meet)