



FEATURES

- **Professional-grade, dual-channel parallel AIS receiver**
- **Decodes all AIS message types: Class A, Class B, Aids to Navigation, SARTs, and more**
- **Ethernet port for direct connection to PCs, servers, or local networks**
- **Built-in WiFi for wireless monitoring and streaming to multiple devices**
- **Supports AP, Station, and AP+STA WiFi modes with TCP/UDP data output**
- **Rugged ABS housing with carbon-reinforced connector side panels**
- **Built-in USB port for local monitoring and configuration**
- **Supplied complete with software**

The R450 series is offered in four models to suit different requirements:

Models with a D designation feature an integrated Digi® network module, while X models are equipped with a Lantronix® Xport module, providing flexibility to match existing network infrastructure or preferences. Versions with the G suffix include an internal GPS receiver in addition to AIS reception.

RECEIVERS

R450-D NETWORK AIS RECEIVER WITH ETHERNET & WIFI

SKU: COM-0027

OVERVIEW

The R450 series is a professional-grade AIS receiver range, designed for shoreside monitoring of vessel traffic within VHF range. It decodes all AIS message types, including Class A, Class B, Aids to Navigation, and SARTs, delivering comprehensive situational awareness for ports, authorities, and commercial users.

With both Ethernet and built-in WiFi connectivity, the R450 streams AIS data directly to PCs, servers, or mobile devices over wired or wireless networks. It supports local monitoring, sharing data across a network, or sending AIS data over the Internet to a fixed IP address for centralised display.

APPLICATIONS

- Monitoring of shipping for government and port authorities
- Managing vessel traffic at port approaches
- Supporting search and rescue operations
- Locating vessels for tug and supply operators
- Analysing shipping activity in designated zones
- Monitoring fishing areas
- Feeding data to AIS vessel tracking websites and services

PHYSICAL

Weight:	250g
Dimensions:	L 140 mm W 120 mm D 37 mm
Mounting:	To flat surface, #6 (3.5mm Dia) Pan Screws
Connections:	RJ45 Ethernet 10/100 Base-T (Digi®) USB 2.0 Port: Type B BNC Coaxial to VHF/AIS antenna
Construction:	ABS Enclosure, PETG-CF Connector Panels
Finish:	Black Fine-texture ABS

ELECTRICAL

Power Supply:	12 V dc 3 W nominal (9-30 V dc)
Antenna Impedance:	50 Ω
Data Output:	NMEA 0183 VDM message, via USB, Ethernet and WiFi

OPERATIONAL

Frequency	Channel A 161.975 MHz Channel B 162.025 MHz
Sensitivity:	Up to -112 dBm
Display:	4 Indicator LEDs (On, Ch A, Ch B, WiFi)
Data Types Received:	Name of Vessel; MMSI Number; Position; Speed (SOG); Course (COG); Type of Vessel; Call Sign; Heading; Rate of Turn; Navigational Status; Vessel Dimensions; Destination

ENVIRONMENTAL

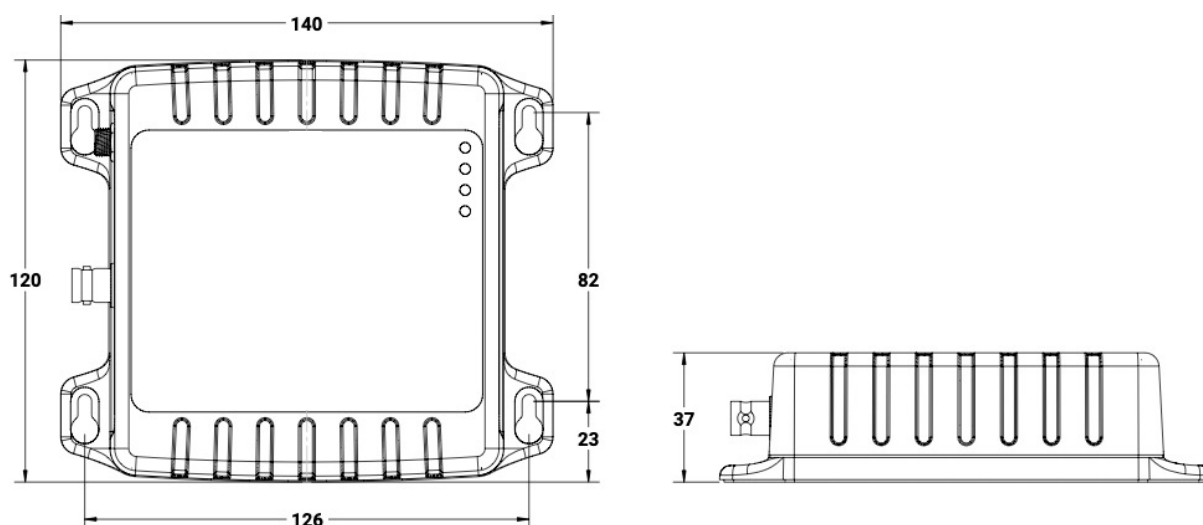
IP Rating:	IP40
Operating temp:	-15°C to +55°C
Compass:	Safe Distance 50 cm

NETWORK

WiFi Module:	Built-in, 2.4 GHz
WiFi Modes Supported:	Access Point, Station, AP+STA
WiFi Security:	WPA/WPA2, configurable SSID & password
WiFi Network Protocols:	TCP/IP, UDP/IP
LAN Network protocols:	TCP/IP, UDP/IP, ARP, ICMP, TFTP, TELNET, DHCP, BOOTP, HTTP and AUTOIP
Data Output:	AIS as NMEA 0183 over TCP/UDP, or USB
LAN Connections:	1 each for TCP Client / Server Up to 32 for UDP Client
WiFi/LAN Configuration:	Via integrated web interface

ADDITIONAL

Supplied:	R450-D AIS Receiver unit
Supplied:	Universal 100-250 V ac to 12 V dc Power Supply
Supplied	BNC to UHF Antenna Connector Adaptor
Supplied:	2m Ethernet cable, 1m USB Cable
Download:	Network configuration program
Download:	AIS viewing program
Download:	USB to virtual com port driver



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