

RECEIVERS

R250 DUAL CHANNEL AIS RECEIVER WITH USB, NMEA & WiFi

SKU: 001-2506

View Online ›

FEATURES

- **Dual-channel AIS receiver**
- **Decodes all AIS message types: Class A, Class B, SARTs, and Aids to Navigation**
- **USB plug-and-play PC connection**
- **NMEA 0183 VDM output for chartplotters and navigation systems**
- **Built-in Wi-Fi for wireless monitoring and data streaming**
- **Multiplexes external GNSS input with AIS data**
- **Rugged ABS housing with carbon-reinforced side plates**
- **Low power consumption, powered via USB or 12/24V DC**
- **Supplied complete with software and cables**

OVERVIEW

The R250 is a high-performance, dual-channel AIS receiver with USB, NMEA 0183, and built-in Wi-Fi outputs. It decodes all AIS messages transmitted by Class A and Class B transponders, AIS SARTs, and Aids to Navigation, delivering complete vessel traffic information that can be displayed on any compatible chartplotter, PC, or mobile device.

The R250 offers flexible operation to suit a range of applications. When connected via USB, it is powered by the PC and streams AIS data directly over the USB cable — ideal as a compact plug-and-play solution. When connected to 12/24V DC power, it provides both USB and NMEA 0183 outputs, and can multiplex external GNSS NMEA input with AIS data to include position information on the output stream.

With its integrated Wi-Fi, the R250 also streams AIS and NMEA data wirelessly to mobile devices or PCs. Housed in a durable ABS enclosure with carbon-reinforced side panels, it combines rugged construction with a compact, modern design.

APPLICATIONS

- Low-cost monitoring of vessel position, speed, and heading within VHF range
- Reception of AIS data from Class A & B vessels, SARTs, and AtoNs
- Compact and flexible installation for leisure or commercial use
- Wireless AIS data streaming to tablets, smartphones, and PCs

RELATED PRODUCTS

R450-D - Network AIS receiver
R500 Series - Intelligent Network AIS receivers
i320W - Bidirectional NMEA WiFi Interface
AV200, AV300, AV400 - AIS Antennas

SPECIFICATIONS

PHYSICAL	
Weight:	250 g
Dimensions:	L 140 x W 120 x H 37 mm
Mounting:	To flat surface, #6 (3.5mm Dia) Pan Screws
Connections:	M8 4-Pin Data Connector USB 2.0 Port: Type B BNC Coaxial to antenna
Construction:	ABS Enclosure, PETG-CF Connector Panels
Finish:	Black Fine-texture ABS

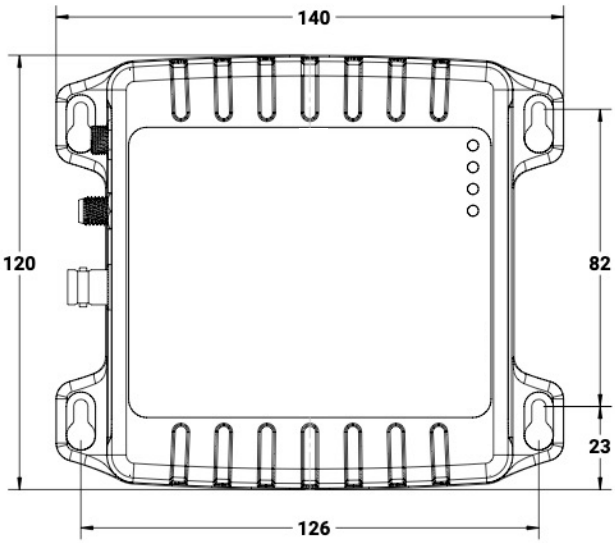
ELECTRICAL	
Power Supply:	12 V dc 3 W nominal (9-30 V dc)
Antenna Impedance:	50 Ω
Data Output:	NMEA 0183 VDM message @ 38400 Baud, also via USB & WiFi
Data Input:	NMEA 0183 at 4800

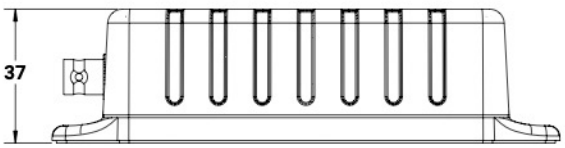
OPERATIONAL	
Frequency	Channel A 161.975 MHz Channel B 162.025 MHz
Sensitivity:	Up to -112 dBm
Display:	On (Green), Channel A (Red), Channel B (Red)
Data Types Received:	Name of Vessel; MMSI Number; Position; Speed (SOG); Course (COG); Type of Vessel; Call Sign; Heading; Rate of Turn; Navigational Status;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

ENVIRONMENTAL	
IP Rating:	IP40
Operating temp:	-15°C to +55°C
Storage temp:	-15°C to +70°C
Operating humidity:	0-93% RH, non-condensing
Compass:	Safe Distance 50 cm

Wi-Fi	
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
WiFi Data Output:	NMEA 0183 over TCP/UDP
WiFi Configuration:	Via integrated web interface

ADDITIONAL	
Supplied:	R250 AIS Receiver Unit Universal 100-250 V ac to 12 V dc Power Supply M8 4-Pin Data Cable, 2m USB Cable, 1m
Supplied:	BNC to UHF Antenna Connector Adaptor
Download:	AIS viewing program
Download:	USB to virtual com port driver





Copyright © 2026 Comar Systems Ltd. - R250 Datasheet v07r01

Vittlefields Technology Centre, Forest Road, Newport, Isle of Wight, United Kingdom. PO304LY
Comar Systems Ltd. reserves the right to make changes to its products and specifications without prior notice.