



## FEATURES

- **Designed for commercial land-based monitoring of sea traffic**
- **Multiple devices linked as a monitoring network and forward data for centralised processing**
- **WiFi and Ethernet network connectivity**
- **Built-in Microcomputer for on-board data processing**
- **Industry Grade Dual Channel AIS Receiver and GPS Receiver**
- **Built-in HDMI port for a Display Monitor**
- **4 Built-in USB ports for local monitoring**
- **Ideal for feeding vessel tracking data to a website or a vessel monitoring server**
- **Built-in micro-SD card slot for storing the OS and supporting software**
- **Logging data on internal storage when no network connection is available**

## RELATED PRODUCTS

[R500Ni](#) - Intelligent Network AIS receiver with WiFi

[G300Ni](#) - Intelligent Network GPS receiver with WiFi

[AG100](#) – GPS Antenna

[AV300](#) – Fibreglass Antenna with Universal Base

[AV400](#) - Commercial Antenna for AIS

## RECEIVERS

# R500NGi INTELLIGENT AIS & GPS RECEIVER WITH WIFI

SKU: 001-1049

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## OVERVIEW

The R500NGi is a powerful and flexible AIS & GPS receiver with WiFi, interfaced to a ARMv8 microcomputer. Designed for coastal monitoring applications, the R500NGi is capable of filtering, processing and forwarding AIS and GPS data across a network, and be locally monitored by installing compatible chart plotting software on the device.

The unit has both WiFi and Ethernet connectivity, as well as 4 USB ports and an HDMI connector for a monitor display. What makes the R500NGi different from other receivers is that it can be deployed in any AIS network using proprietary software specific to that network and is shipped without software installed as a development platform. Comar also offers standard installation and bespoke data management solutions as optional extras.

The R500NGi is designed for use by the commercial market and uses Comar's well proven and internationally specified high sensitivity dual channel parallel AIS receiver and commercial grade GPS receiver.

The R500NGi from Comar Systems: Quite possibly the most versatile AIS & GPS receiver available today.

## APPLICATIONS

- Local shoreside and remote networked monitoring
- Managing traffic at local port approaches
- Assisting in Search and Rescue operations
- Locating ships for local tug/supply operators or security operations
- Analysing shipping in specific areas
- Monitoring fishing zones
- Feeding data to AIS vessel tracking websites
- Remote monitoring of valuable mobile assets.

PHYSICAL	
<b>Weight:</b>	450g
<b>Dimensions:</b>	L 135 mm W 80 mm D 39 mm
<b>Mounting:</b>	To flat surface; 2 holes in case bottom
<b>Connections:</b>	Micro USB (Power); RJ45 Ethernet 10 / 100 Base-T; 4x USB 2.0 type B socket; BNC Coaxial to antenna; TNC Coaxial to GPS antenna; Micro-SD card slot
<b>Construction:</b>	Plastic housing
<b>Finish:</b>	Black plastic, textured

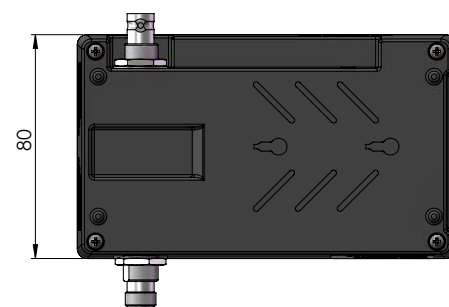
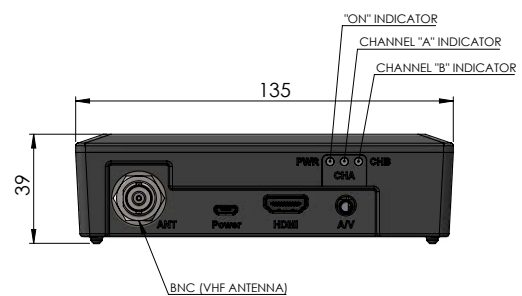
ELECTRICAL	
<b>Power Supply:</b>	5 V dc; 900 – 1200 mA typical
<b>Antenna Impedance:</b>	50 Ω
<b>USB power:</b>	100 mA each port (max)

OPERATIONAL	
<b>Frequency</b>	AIS : Channel A 161.975 MHz AIS : Channel B 162.025 MHz GPS: 1575.42MHz
<b>Sensitivity:</b>	< -112 dBm
<b>Microcomputer:</b>	Raspberry Pi™ 3 (1.2 GHz 64bit quad-core ARM v8 CPU)
<b>WiFi:</b>	802.11n
<b>Display:</b>	3 Indicator LEDs (Ch A; Ch B; Power ON)
<b>Data Types Received:</b>	AIS: Name of Vessel; MMSI Number; Position; Speed (SOG); Course (COG); Type of Vessel; Call Sign; Heading; Rate of Turn; Navigational Status; Vessel Dimensions; Destination and others  GPS: Standard - GPRMC GPGGA GPGSA GPGSV Optional - PGRME GPGLL GPVTG PGRMV PGRMF PGRMB PGRMM PGRMT

ENVIRONMENTAL	
<b>IP Rating:</b>	IP40
<b>Operating temp:</b>	-15°C to +55°C
<b>Compass:</b>	Safe Distance 50 cm

ADDITIONAL	
<b>Supplied:</b>	R500NGi receiver (without software)
<b>Option 1:</b>	R500NGi receiver with standard configuration Software
<b>Option 2:</b>	R500NGi receiver with bespoke data management software



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