





**RECEIVERS** 

# R500Ni INTELLIGENT AIS RECEIVER WITH WIFI

SKU: 001-1048

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### **FEATURES**

- Designed for commercial land-based monitoring of sea traffic
- WiFi and Ethernet network connectivity
- Built-in Microcomputer for on-board data processing
- Industry Grade Dual Channel AIS 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

#### **OVERVIEW**

The Comar R500Ni with WiFi is an AIS receiver interfaced to an ARMv8 microcomputer. The R500Ni is designed for coastal monitoring applications and is capable of filtering and processing AIS data and forwarding it across a network. In this way, several R500Ni units can be used to form a complete networked monitoring solution for monitoring a port and its approaches.

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 R500Ni different from other receivers is that it can be deployed in any AIS network using proprietary software specific to that network and is shipped 'bare bones'.

The R500Ni is designed for use by the commercial market and uses Comar's well proven and internationally specified high sensitivity dual channel parallel receiver.

The R500Ni from Comar Systems: Quite possibly the most flexible and powerful AIS receiver available today.

#### **APPLICATIONS**

- For shoreside monitoring of shipping by Government bodies
- 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

#### **RELATED PRODUCTS**

R500NGi - Intelligent Network AIS & GPS receiver with WiFi

AV300 - Fibreglass VHF Antenna

AV400 - Commercial Antenna for AIS

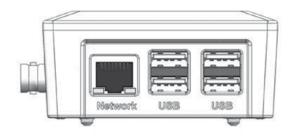
## **SPECIFICATIONS**



PHYSICAL	
Weight:	400g
Dimensions:	L 135 mm W 80 mm D 39 mm
Mounting:	To flat surface; 2 holes in case bottom
Connections:	Micro USB (Power); RJ45 Ethernet 10 / 100 Base-T; 4x USB 2.0 type B socket; BNC Coaxial to antenna; Micro-SD card slot
Construction:	Plastic housing
Finish:	Black plastic, textured

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

OPERATIONAL	
Frequency	Channel A 161.975 MHz Channel B 162.025 MHz
Sensitivity:	< -112 dBM
Microcomputer:	Raspberry Pi™ 3 (1.2 GHz 64bit quad-core ARM v8 CPU)
WiFi:	802.11n
Display:	3 Indicator LEDs (Ch A; Ch B; Power ON)
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 and others



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

Conforms with:	IEC 61993-2; IEC 60945; EN 61000-6-1 & 2; FCC part 15
ADDITIONAL	
ADDITIONAL	

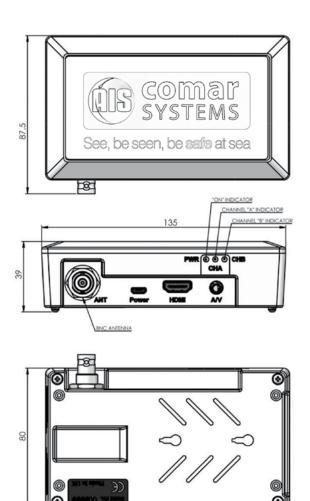
R500Ni receiver 'bare bones' without software

Internal GPS module installed via GPIO port

**APPROVALS** 

Supplied:

Option:





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