

RECEIVERS

R550Ni INTELLIGENT NETWORK AIS RECEIVER WITH Wi-Fi

SKU: 001-1149

FEATURES

- **Designed for commercial land-based monitoring of maritime traffic**
- **Ideal for feeding vessel tracking data to a website or a vessel monitoring server**
- **Ethernet & Wi-Fi network connectivity**
- **Industry Grade Dual Channel AIS Receiver**
- **Supplied with Comar Connect AIS data forwarding software**
- **Built-in Microcomputer with Quad-core ARM Cortex-A72 processor for on-board data processing**
- **16GB eMMC for storing the OS and supporting software**
- **Built-in HDMI port for a Display Monitor**
- **2 Built-in USB-A host ports**
- **Bluetooth 5.0 enabled**
- **Low power consumption through the USB-C input**

OVERVIEW

The Comar R550Ni is a Network AIS receiver interfaced to an ARMv8 microcomputer. The R550Ni 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 R550Ni units can be used to form a complete networked monitoring solution for monitoring ports and their approaches.

The unit has both Wi-Fi and Ethernet connectivity, as well as 2 USB-A host ports and HDMI connector for a monitor display. What makes the R550Ni different from other receivers, is that it can be deployed in any AIS network using proprietary software specific to that network.

The R550Ni is designed for use by the commercial market and uses Comar's well proven and internationally specified high sensitivity dual channel parallel receiver.

The R550Ni from Comar Systems: Quite possibly the most flexible, compact 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

R550NGi - Intelligent Network AIS & GNSS receiver with Wi-Fi
AV300 - Fibreglass VHF Antenna
AV400 - Commercial Antenna for AIS

SPECIFICATIONS

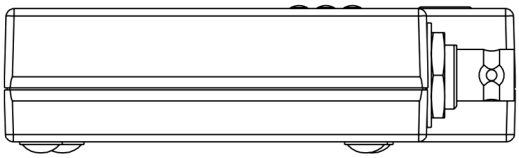
PHYSICAL	
Weight (Net):	130g
Dimensions:	L 90 mm W 96 mm D 28 mm
Connections:	USB-C (Power) RJ45 Gigabit Ethernet Port 2x USB 2.0 Type A Host Ports HDMI Port BNC Coaxial to Antenna
Construction:	ABS Enclosure
Finish:	Black, ABS

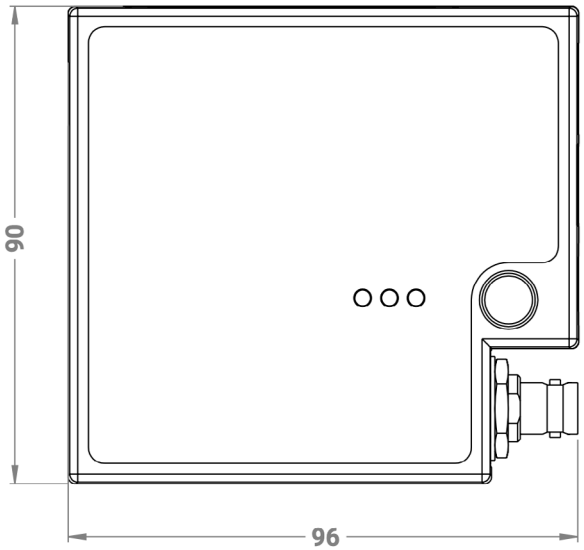
OPERATIONAL	
Frequency	Channel A 161.975 MHz Channel B 162.025 MHz
Sensitivity:	Up to -112 dBm
Microcomputer:	Raspberry Pi Compute Module 4 64-Bit, Quad-core ARM Cortex-A72 processor 1GB RAM; 16GB eMMC (Other memory and storage options available)
Network:	Must be DHCP enabled for initial set-up. Fixed IP address can be later configured.
Wi-Fi:	Dual-band 2.4/5.0GHz, 802.11b/g/n/ac
Bluetooth:	Bluetooth 5.0
Display:	3 Indicator LEDs (Ch A; Ch B; Power ON)
NMEA 0183 Data Received:	Name of Vessel; MMSI Number (Subject to transponder setup); Position; Speed (SOG); Course (COG); Type of Vessel; Call Sign; Heading; Rate of Turn; Navigational Status; Vessel Dimensions; Destination and others

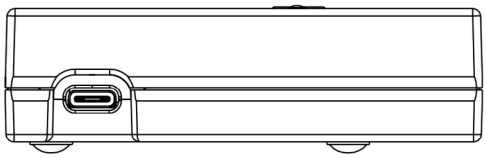
ELECTRICAL	
Power Supply Adapter (Recommended):	5.1V dc; 900 – 1200 mA typical
Antenna Impedance:	50 Ω
USB power:	100 mA each port (max)

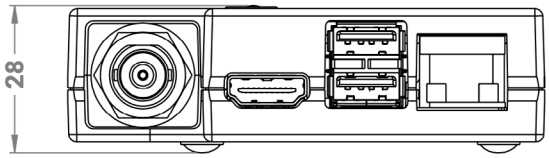
ENVIRONMENTAL	
IP Rating:	IP40
Operating temp:	-15° to +40°
Storage temp:	-15°C to +70°C
Operating humidity:	0-93% RH, non-condensing
Compass:	Safe Distance 50 cm

ADDITIONAL	
Supplied:	Comar Connect data management software, for advanced AIS data forwarding and networking.
Note:	Wi-Fi & Bluetooth are only available via the Raspberry Pi OS, and not configurable through Comar Connect.
Note:	The USB ports operate as host interfaces for peripherals such as a keyboard, mouse, or USB storage device. They are not intended for AIS data output.









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Vittlefields Technology Centre, Forest Road, Newport, Isle of Wight, United Kingdom. PO304LY
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