

# MSR ANTENNAS

## On-board Buoy reception system

### Description

Marine Sat Receiver (MSR) is the Marine Instruments satellite buoy reception system.

The MSB software delivered with the MSR receiver makes the buoy reception through MSR completely transparent for users.

With the internal GPS in the antenna of the MSR, the vessel position is always shown on the chart of the MSB software, providing with information about time and distance of arrival to buoys, route monitoring, etc.

The MSR consists of an external antenna and an interface which is connected to the PC through a USB connection or serial port. All the components necessary to its installation are supplied.

The MSR interface includes LEDs which allow a quick and visual monitoring of the device operation: receiver and GPS state, communication with the computer, etc.

### Operation

The MSR is connected to the computer through USB or two serial ports.

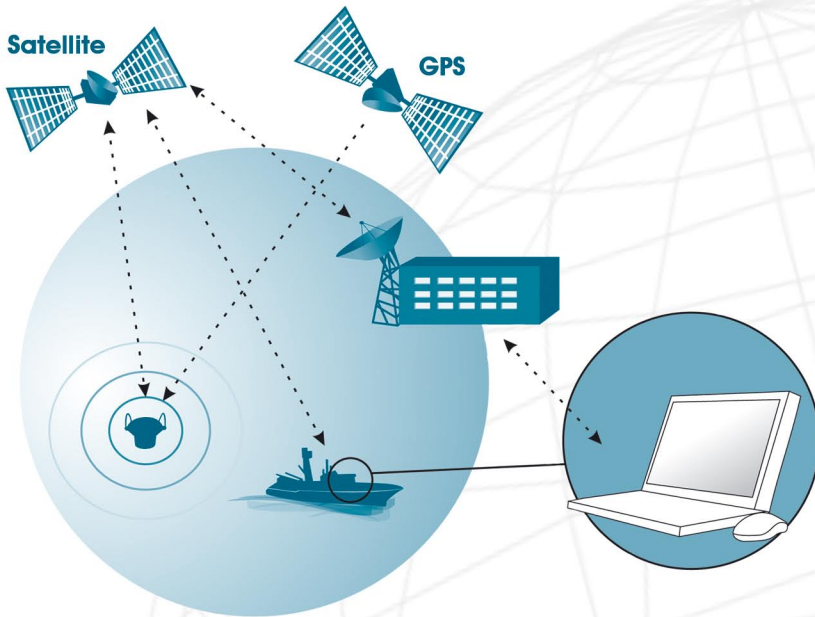
The GPS signal and the buoy messages are automatically interpreted and displayed on the MSB C-MAP charts.

Sending telecommands to buoys is quick and simple, without depending on other on-board communication systems.

### Ventajas

- Automatic reception.
- Autonomous system.
- Global coverage.
- Less than 1 minute latency for 90% of the messages.
- Spread-spectrum communication technology, difficult to detect by third parties.
- Internal GPS and possibility of NMEA external GPS.
- Connection to the PC through USB or serial port.
- Visual monitoring of the system state.





### Communications

On-board data reception is automatic and the buoys are controlled through the MSB software.

### Technical features

**Supply voltage:** 110-220 VAC / 15-24 Vdc

**Average consumption:** 1.5 W

**Operating temperature:** 0 °C to +55 °C

**Antenna's weight:** 2.2 Kg

**Interface's weight:** 0.4 Kg

**Dimensions:** according to drawing.

