

# TRANSMITTER

# MAR GE V2



## Fishing vessel monitoring

The MAR GE V2 Argos-GPS transmitter is specially designed for fishing vessel monitoring. It automatically transmits the position, speed, and heading of the fishing vessel to the Argos satellite system. The MAR GE V2 can also transmit catch reports which include fish species and quantities with a Psion data terminal or with a PC.

The MAR GE V2 is robust and the installation is very simple. It can be installed by the crew while the ship is on her way.

## Performances

- Full global coverage (from north to south pole)
- Positions accurate to within 100 meters using a GPS receiver.
- 24 hourly positions plus intermediate positions given at satellites' passes
- Vessel speed (in knots) and heading (in degrees) given by the GPS
- Backup positioning by the Argos satellite system
- Installed in an hour, immediate activation
- Robust all-in-one design for marine environment
- No computer required
- Backup battery in case of main board power failure
- MAR GE V2 available in low energy consumption version, powered on service battery.

|                   |  |
|-------------------|--|
| Size              | Dome: 165 mm diameter, 135 mm height<br>Interface box: 150 mm x 110 mm x 60 mm |
| Cables            | dome to interface box cable 15 m, interface box cable to main board power 5 m  |
| Weight            | Dome: 1.450 kg   |
| Temperature       | Operating temperature: -20°C to +50°C<br>Storage temperature: -25°C to +70°C   |
| Waterproofness    | IP66 (splashproof, non submersible)  |
| Power             | External 12-24 Vdc power supply (12 to 50 Vdc tolerance)                       |
| Current drain     | 200 mA average drain (at 140 seconds transmit interval) at 24V                 |
| Internal battery  | 72 h autonomy in case of main board power failure                              |
| Output power      | 32 dBm (1.5 W)   |
| Output frequency  | 401.650 MHz ± 30 kHz   |
| Argos transmitter | Cnes certified transmitter   |
| Argos message     | Length: 224 bits, standard 140 second interval                                 |
| GPS receiver      | µBlox 12-channel receiver  |

\* Technical characteristics are subject to change without prior notice

## Interface Box



Compact and convenient interface box for fishermen:

- Secured button to request assistance (option)
- 15 meter cable to connect the external power supply of the vessel
- Connection for an optional Psion keyboard
- Connection for optional sensors (winch engine, fish pump, thermometer, etc.)
- Light display (transmitter powered, transmission active)

- **Beeper for special events:** activation when the main power supply is off, or when the request for assistance button is pushed.
- **Positions saved:** transmitted positions are saved for 6 months at 60 minutes GPS acquisition interval.
- **Tamper-proof features:**
  - A switch indicates if the main dome or the back-up battery compartment has been opened and transmits a special alert via the Argos satellites
  - Tamper-proof seals encasing the dome and electronics box
  - No access to the programming interface

### Options

- **Stop in port:** detection of a stop in port and switch to save mode until the vessel moves again.
- **Logical sensor input:** transmission of logical status at every hour (such as pump active or non active).
- Concerning vessels without power supply, we can provide you a low energy consumption < 9mA. This service battery will last up to one year..

## Functionalities

- **GPS fix interval:** transmission of the GPS fixes obtained at 15, 30 or 60 minute intervals.
- **GPS speed and heading:** transmission of the speed and the instant heading for all locations.



CLS Representative