

# INMARSAT WF-BD +

## Fish marking buoy



Credit photo : JA Bocillis

### Advantages

#### - DISCRETION

Its characteristics (blue colour, levelled shape) make it difficult to see and to locate by radar. Considering the type of signal encryption, data decoding by "pirate receivers" or by the server is impossible and this makes the system all the more secure and confidential.

#### - COVERAGE AREA

The important coverage area allows to receive a buoys whatever its distance from the boat etc.

#### - AUTOMATIC TRANSMISSION LIMITATION

After a limited number of transmission (4, 8 or 12) in 8 or 24 times a day mode, the buoy mode is automatically set back in its common mode: 1 time a day.

### Description

The fish marking buoy WF-BD+ has been specifically designed to mark flotsam used for tuna fishing. This buoy is moored to a flotsam released at sea to mark shoals.

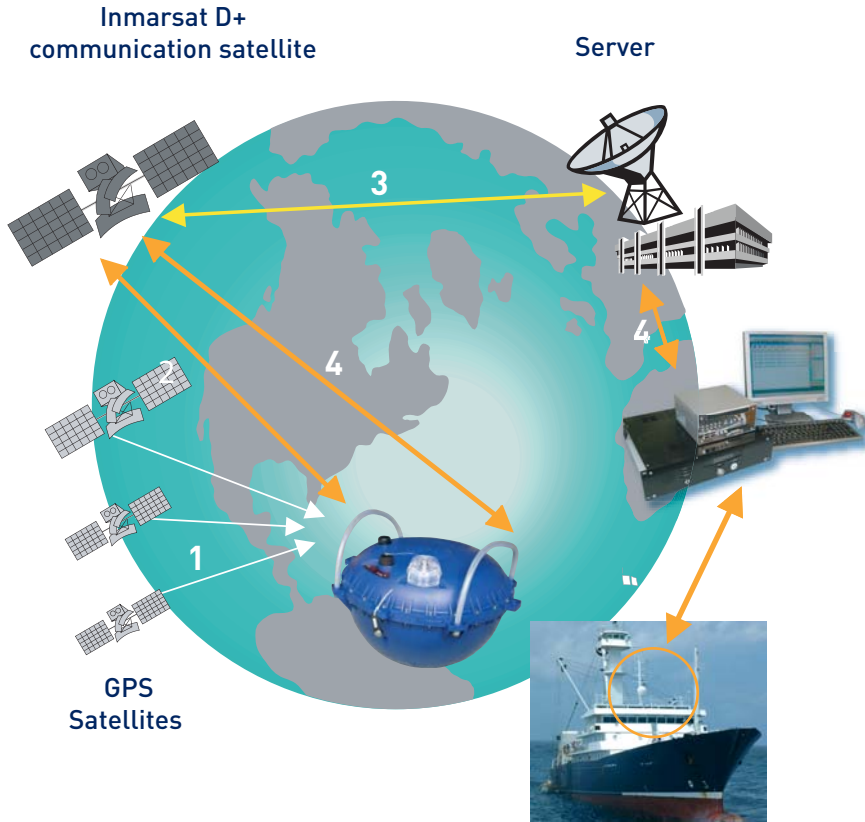
The WF-BD+ buoy is a sturdy half-sphere of 400 mm diameter, made of moulded plastic. It is equipped with an INMARSAT D+ transceiver, a GPS, a temperature sensor and a flashlight.

### Operating principle

The buoy transmits its GPS position, the water temperature and the battery level from one to 24 times a day depending of its transmission mode on the up link of INMARSAT D+ satellite communication service. The D+ buoys is in reception every four hours allowing a modification of the transmission mode.

The data are forwarded to the ship by INMARSAT D+ or through the high speed data communication link of the vessel if it is equipped with such a link. The NEPTUNE software designed by KANNAD manages the buoys and the associated data.

## Sistem



## Remote control of the buoy

The outstanding advantage of the WF-BD+ buoy is the possibility to modify if necessary some parameters directly from the ship:

- Transmission intervals of the buoy position (once to 24 times a day)
- Number of transmission in 8 or 24 times a day mode (4, 8 or 12)
- Activation of a flashlight to locate the buoy visually

## TECHNICAL CHARACTERISTICS

### Transmission/Reception



Inmarsat D+ receiver

Frequency	Rx	1525 to 1559MHz
	Tx	1526.5 to 1660.5MHz

### Permanent global coverage

- Passive stand-by mode to optimise consumption.
- Active stand-by mode every four hours for remote modification of parameters six times by day.

### Message forwarding time

About	20 minutes
Success rate	94%
The success rate is an Inmarsat D+ system constraint.	

### Temperature range

Operating	-10°C +50°C
Storage	-10°C +50°C

### Mechanical characteristics

Hemispherical float	
Diameter	400mm
Colour	blue
Weight	15Kg
Watertightness	0,3 bar

### Power supply

Batteries	alkaline batteries 24V 54Ah
Average autonomy	one year