



MOBILIS

DATA BUOYS

-

REFERENCES



Mobilis has designed a range of standard data buoy platforms however all the data buoys can be customised to meet the customer's specifications. Customisation can include sensor package and mountings, solar panels, wind generators, batteries, data loggers and telemetry systems.

All Mobilis buoys have been designed to withstand the harsh environment in which they will operate while retaining good stability and sufficient buoyancy reserve.

Listed below are a selection of data buoy platforms and examples of typical applications.



DIAMETER 1200 mm

FOCAL PLANE 1680 mm

TOTAL HEIGHT 1880 mm

WEIGHT 200 kg

DEPTH 20 m approx



COUNTRY	France
APPLICATION	Dredging study
FUNCTIONALITIES, MEASURES	Turbidity measurements
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF V SATELLITE ☐



DB 350



DIAMETER 1200 mm

FOCAL PLANE 1680 mm

TOTAL HEIGHT 2600 mm

WEIGHT 300 kg

DEPTH 5 m approx



COUNTRY	Colombia
APPLICATION	Scientific and metocean
FUNCTIONALITIES, MEASURES	Chlorophyll analysis, pH, OD, Turbidity, conductivity, salinity, water temperature and mean water level
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☒ VHF ☐ SATELLITE ☒



DB 500

DIAMETER 1200 mm
FOCAL PLANE 1510 mm
TOTAL HEIGHT 2180 mm
WEIGHT 200 kg
DEPTH 30 m approx



S-VANS

COUNTRY	Japan
APPLICATION	Scientific
FUNCTIONALITIES, MEASURES	Radioactivity measurements
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☒ SATELLITE ☐



DB 500



DIAMETER 1200 mm

FOCAL PLANE 1510 mm

**TOTAL
HEIGHT** 2200 mm

WEIGHT 200 kg

DEPTH 30 m approx



COUNTRY	Guinea
APPLICATION	Metocean
FUNCTIONALITIES, MEASURES	Conductivity, temperature, fluorimeter, chlorophyll and turbidity, dissolved oxygen measurement
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DB 500

DIAMETER 1200 mm
FOCAL PLANE 1510 mm
TOTAL HEIGHT 2200 mm
WEIGHT 200 kg
DEPTH 15 m approx



COUNTRY	Oman
APPLICATION	Industry
FUNCTIONALITIES, MEASURES	Water temperature
DATA TRANSMISSION SYSTEM	AIS v GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DIAMETER 1250 mm
FOCAL PLANE 2300 mm
TOTAL HEIGHT 5900 mm
WEIGHT 680 kg
DEPTH 10 m approx



COUNTRY	France
APPLICATION	Smart management of the mooring area
FUNCTIONALITIES, MEASURES	Measurement of waves, wind, the weather data buoy alerts periodically retrieves operating data, these data are then compared to the alert thresholds set by the operator on the maximum conditions of use of the mooring buoys located nearby.
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☒ VHF ☐ SATELLITE ☐



DB 2000



DIAMETER 1850 mm

FOCAL PLANE 1960 mm

TOTAL HEIGHT 4220 mm

WEIGHT 1000 kg

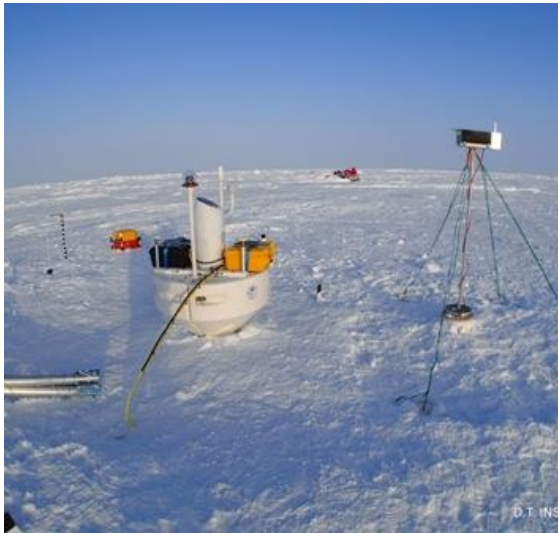
DEPTH 50 m approx



COUNTRY	Netherlands
APPLICATION	Dredging study
FUNCTIONALITIES, MEASURES	Turbidity measurement, pipe study
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☒ SATELLITE ☐



DB 2500



DIAMETER 1850 mm

FOCAL PLANE NA

TOTAL HEIGHT 1500 mm

WEIGHT 500 kg

DEPTH NA



COUNTRY	France
APPLICATION	Scientific researches
FUNCTIONALITIES, MEASURES	Arctic climate change monitoring - LIDAR, ODS, underwater profile, air temperature and pressure http://iaoos-equipex.upmc.fr/fr/campagnes_de_terrain/test_structure.html https://www.youtube.com/watch?v=zZGi28MmmQM
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE ☒



DB 2000



DIAMETER 1850 mm

FOCAL PLANE 1920 mm

TOTAL HEIGHT 4500 mm

WEIGHT 980 kg

DEPTH 50 m approx



COUNTRY	France
APPLICATION	Scientific
FUNCTIONALITIES, MEASURES	Monitors the coastal marine environment, temperature, salinity, oxygen, turbidity, phytoplankton chlorophyll
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☒ VHF ☒ SATELLITE ☐





DIAMETER 1850 mm

FOCAL PLANE 2150 mm

TOTAL HEIGHT 5500 mm

WEIGHT 1030 kg

DEPTH 100 m approx



COUNTRY	Spain
APPLICATION	Scientific Research Bioacoustics laboratory http://www.listentothedeep.com/acoustics/listenrt.php
FUNCTIONALITIES, MEASURES	Hydrophone, records the soundtrack of the ocean
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☒ SATELLITE ☐



DB 2500



DIAMETER 1850 mm
FOCAL PLANE 2150 mm
TOTAL HEIGHT 5500 mm
WEIGHT 1030 kg
DEPTH 20 m approx



COUNTRY	Monaco
APPLICATION	Acoustic measurement of the work impact on the underwater world
FUNCTIONALITIES, MEASURES	Hydrophone, records the soundtrack of the ocean, special mooring 100% silent
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☒ SATELLITE ☐



DB 4000



DIAMETER 2400 mm

FOCAL PLANE 3400 mm

TOTAL HEIGHT 5500 mm

WEIGHT 1500 kg

DEPTH 30 m approx



COUNTRY	France
APPLICATION	Industry - nuclear
FUNCTIONALITIES, MEASURES	Water outlet temperature
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE V ☐



DB 4000



DIAMETER 2400 mm
FOCAL PLANE 4000 mm
TOTAL HEIGHT 8000 mm
WEIGHT 2200 kg
DEPTH 30 m approx

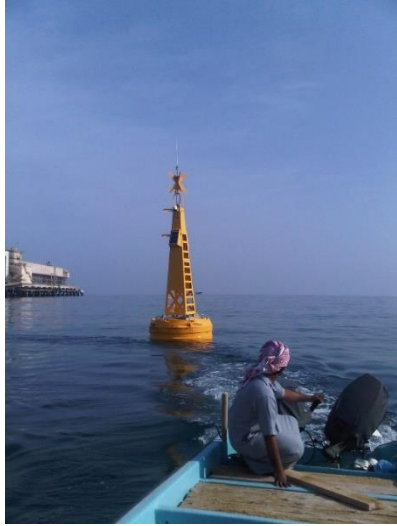


UPMC
 URBAIN P. SORBONNE UNIVERSITÉS

COUNTRY	Senegal
APPLICATION	Scientifique Research
FUNCTIONALITIES, MEASURES	Aerial measurements: air temperature, relative humidity, atmospheric pressure, wind, radiation, precipitation Underwater measurement: oxygen and carbon, temperature (11 depths), salinity, current (continuous profile). https://sites.google.com/site/jointinternationallabeclairs/melax https://docs.google.com/file/d/0BxtFA2guFUjCUk1VT1pEbHdpaFE/view
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE ☒



DB 5000



DIAMETER 2400 mm

FOCAL PLANE 5400 mm

TOTAL HEIGHT 8000 mm

WEIGHT 2200 kg

DEPTH 30 m approx



COUNTRY	Oman
APPLICATION	Industry
FUNCTIONALITIES, MEASURES	Water inlet and outlet temperature
DATA TRANSMISSION SYSTEM	AIS v GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DB 5700



DIAMETER 2600 mm

FOCAL PLANE 3500 mm

TOTAL HEIGHT 7000 mm

WEIGHT 2000 kg

DEPTH 900 m approx



COUNTRY	Angola
APPLICATION	Oil & Gas. FPSO system for assisting the berthing of tankers
FUNCTIONALITIES, MEASURES	Weather buoy for waves, speed and direction of the current (ADCP)
DATA TRANSMISSION SYSTEM	AIS v GPS/GPRS ☐ VHF ☐ SATELLITE ☐



LB 3000



DIAMETER 3000 mm

FOCAL PLANE 4000 mm

TOTAL HEIGHT 7300 mm

WEIGHT 2800 kg

DEPTH 30 m approx



COUNTRY	Netherlands
APPLICATION	Port monitoring
FUNCTIONALITIES, MEASURES	Weather Buoy for Speed and Current Direction (ADCP)
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DB 8000



DIAMETER 3000 mm
FOCAL PLANE 3700 mm
TOTAL HEIGHT 7700 mm
WEIGHT 2,5 to 3 t
DEPTH 1600 m approx



COUNTRY	Angola
APPLICATION	Oil & Gas. FPSO system for assisting the berthing of tankers
FUNCTIONALITIES, MEASURES	Weather buoy for waves, speed and direction of the current (houlometer + ADCP)
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DIAMETER 3000 mm
FOCAL PLANE 3700 mm
TOTAL HEIGHT 7700 mm
WEIGHT 3 t
DEPTH 70 m approx



COUNTRY	France
APPLICATION	Laboratory buoy Intercomparison of wave measurements
FUNCTIONALITIES, MEASURES	Metocean buoy for wave measurement (direction, frequency, height), current speed and direction (ADCP), meteorological data, radioactivity measurement. https://mobilis-sa.com/DataBuoy/planier/dashboard/
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☒ VHF ☐ SATELLITE ☐





DIAMETER 3000 mm

FOCAL PLANE 3800 mm

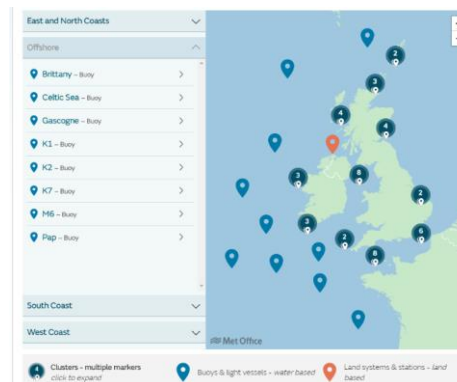
TOTAL HEIGHT 6500 mm

WEIGHT 2,5 à 3 t

DEPTH 1000 m approx



COUNTRY	England
APPLICATION	Weather data buoy
FUNCTIONALITIES, MEASURES	Surface temperature, turbidity, air temperature, wind speed, waves. The MOBILIS buoys of the Met Office participate in a data collection network: http://www.metoffice.gov.uk/public/weather/marine-observations/#?tab=marineObsMap
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☐ VHF ☒ SATELLITE ☐



DB 8000



DIAMETER 3000 mm

FOCAL PLANE 4000 mm

TOTAL HEIGHT 7000 mm

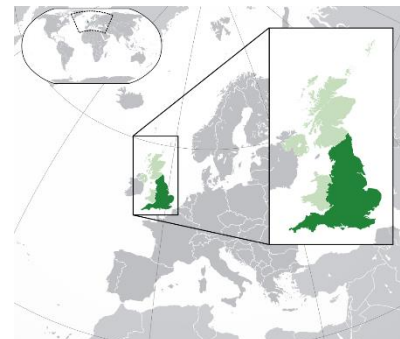
WEIGHT 2,5 à 3 t

DEPTH 800 m approx



PML | Plymouth Marine Laboratory

COUNTRY	England
APPLICATION	Scientific researches
FUNCTIONALITIES, MEASURES	Monitoring and quantification of physical, biological and chemical changes in the marine environment: surface temperature, salinity, oxygen, turbidity, fluorescence, air temperature, humidity, wind speed and direction, atmospheric pressure, CDOM fluorescence, nitrate, hyperspectral radiometer, sunlight, pyranometer
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☐ VHF ☒ SATELLITE ☐



DB 8000



DIAMETER 3000 mm

FOCAL PLANE 3800 mm

TOTAL HEIGHT 6400 mm

WEIGHT 2,5 à 3 t

DEPTH 40 m approx



COUNTRY	Malaysia
APPLICATION	Mining industry
FUNCTIONALITIES, MEASURES	Weather buoy for wind measurement, air temperature, humidity, pressure, waves, speed and direction of flow (houlographeet ADCP)
DATA TRANSMISSION SYSTEM	AIS v GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DB 8000



DIAMETER 3000 mm

FOCAL PLANE 4500 mm

TOTAL HEIGHT 6800 mm

WEIGHT 2,5 à 3 t

DEPTH 50 m approx



Dimar
Dirección General Marítima
Autoridad Marítima Colombiana

COUNTRY	Colombia
APPLICATION	Scientific
FUNCTIONALITIES, MEASURES	Weather buoy for wind measurement, air temperature, humidity, pressure, visibility, water temperature, salinity, conductivity, waves, current profile (houlograph + ADCP)
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☒ GOE ☒ VHF ☐ SATELLITE ☒





DIAMETER 3600 mm
FOCAL PLANE 4300 mm
TOTAL HEIGHT 9100 mm
WEIGHT 3 t
DEPTH 100 m approx



COUNTRY	France
APPLICATION	Scientific researches
FUNCTIONALITIES, MEASURES	Monitoring the marine and coastal environment and the impact of human activity on the coast. Multiparameter probe mounted on a winch for the measurement of daily profiles. http://www.obs-vlfr.fr/data/view/eol/ctd/
DATA TRANSMISSION SYSTEM	AIS ☒ GPS/GPRS ☒ VHF ☐ SATELLITE ☐



DB 14000



DIAMETER 3600 mm

FOCAL PLANE 4300 mm

TOTAL HEIGHT 9100 mm

WEIGHT 3 t

DEPTH 100 m approx



GeoSystem Research Corporation
www.geosr.com

COUNTRY	South Korea
APPLICATION	Scientific researches
FUNCTIONALITIES, MEASURES	Dual functionality: maritime markup and scientific research (current measurement and weather data)
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE ☐





DIAMETER 3600 mm

FOCAL PLANE 4200 mm

TOTAL HEIGHT 7800 mm

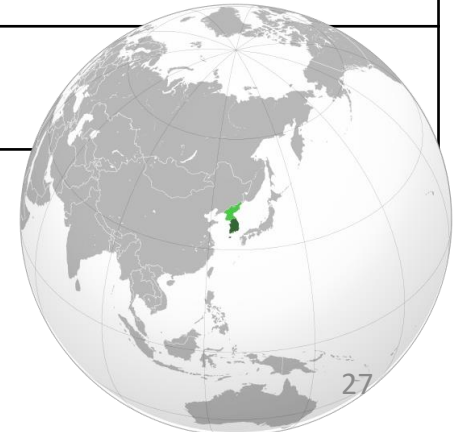
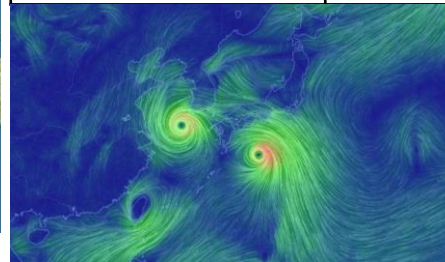
WEIGHT 3 t

DEPTH 150 m approx



GeoSystem Research Corporation
www.geosr.com

COUNTRY	South Korea
APPLICATION	Scientific Research
FUNCTIONALITIES, MEASURES	JINDO buoy, dual functionality: maritime buoyage and scientific research (current measurement and weather data). It resists 7kn current thanks to a robust design and a suitable mooring, dimensioned by MOBILIS. At the end of August 2018, SOULIK typhoon touched the South Korean peninsula. It's one of the most dangerous typhoons in Korean history. The maximum wave height measured by the buoy is 9m and the wind speed 30m / s. The buoy survived and continued its measurements during the event.
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DB 14000

DIAMETER 3600 mm

FOCAL PLANE 4500 mm

TOTAL HEIGHT 6800 mm

WEIGHT 3 t

DEPTH 200 m approx



COUNTRY	France
APPLICATION	Scientific research and defense
FUNCTIONALITIES, MEASURES	Confidential
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☐ SATELLITE ☐



DB 14000

DIAMETER 3600 mm
FOCAL PLANE 5300 mm
TOTAL HEIGHT 12700 mm
WEIGHT 5 t
DEPTH 100 m approx



COUNTRY	Japan
APPLICATION	Scientific research
FUNCTIONALITIES, MEASURES	Analysis of wave motion and other meteorological data to analyze and understand the disappearance of sand in the area.
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☒ VHF ☐ SATELLITE ☒



DB 16000



DIAMETER 3600 mm

FOCAL PLANE 6700 mm

TOTAL HEIGHT 10000 mm

WEIGHT 4,5 t

DEPTH 500 m approx



Hitz
Hitachi Zosen

COUNTRY	Japan
APPLICATION	Tsunami detection
FUNCTIONALITIES, MEASURES	Weather buoy for tsunami detection
DATA TRANSMISSION SYSTEM	AIS ☐ GPS/GPRS ☐ VHF ☒ SATELLITE ☒





« L'Organisation météorologique mondiale (OMM) a annoncé ce mardi avoir détecté une vague de 19 mètres de haut dans l'Atlantique Nord. La déferlante a été enregistrée par une bouée automatique basée entre l'Islande et le Royaume-Uni le 4 février 2013, explique l'OMM qui vient d'en analyser les données

« C'est la première fois de l'histoire qu'une hauteur de vague de 19 mètres est mesurée ; ce record est remarquable », a déclaré le sous-secrétaire général de l'OMM, Zhang Wenjian. Le précédent record (18,275 mètres) pour une vague océanique avait été enregistré dans l'Atlantique Nord le 8 décembre 2007.

« Cela montre à quel point les observations et les prévisions météorologiques et océaniques contribuent à assurer la sécurité de l'industrie maritime, ainsi que des équipages et des passagers sur les grandes routes maritimes », souligne encore l'OMM dans son communiqué. »

<https://public.wmo.int/en/media/press-release/19-meter-wave-sets-new-record-highest-significant-wave-height-measured-buoy>

La bouée qui a mesuré cette vague est une bouée Mobilis, mise à l'eau avec une ligne de mouillage recommandée par Mobilis.



Système de connecte des données MOBILIS:

Mobilis offre un logiciel et des représentations graphiques pour répondre aux spécifications des clients.

Capacités d'ingénierie:

L'équipe Mobilis discute de vos besoins avec vous en utilisant de nombreuses années d'expérience, afin de proposer une solution sur mesure pour répondre à vos exigences. La confidentialité complète du client sera maintenue en tout temps.

Forces:

Ingénierie en interne avec des logiciels de conception électrique et mécanique. Le design et la fabrication sont menés dans le respect du système qualité ISO-9001.

Communication en 6 langues:

Français, Anglais, Hollandais, Espagnol, Japonais, Arabe.