

OBSCAPE PROFILE

We have been developing, manufacturing and supplying real-time systems for environmental observations for over a decade.

Our mission is to make high quality, environment observations easy. Our instruments are designed to be easily installed, compact, robust and low maintenance. The small size and integrated telemetry and solar power make our instruments very easy to use and deploy.

Your observations have never been so convenient and your time in the field so short.

About Us

Obscape supplies easy to use, real-time observation systems for your environment.

Our inhouse R&D allows us to manufacture & design Powered Telemetry Module (PTM) systems for monitoring & communication to a visual data portal which can be globally accessed on any device of your choosing.

By consolidating various measurements into a single portal, a large network of PTM devices can easily be monitored and maintained. Graphical charts, setting of thresholds and alerts are just some of the easy to use innovative features provided.

Whether you are measuring with a single PTM device or with an extensive multi-sensor setup, our systems will support you in managing your primary process with minimum fuss.

Company history

The company formed as a result of a 5-year collaboration between South Africa-based Environap and Netherlands-based H-Max, both of which have extensive experience in marine and coastal monitoring. Faced with the high costs and limitations of conventional measurement equipment, the company's founders were inspired to experiment with developing their own sensors and devices.

Sticking to the principle of easy-to-use and reliable real-time equipment, Powered Telemetry Module observation systems were developed. The PTM product range includes weather, rain, water level measurement and camera devices. Obscape B.V. is registered in the Netherlands and has offices in Rijswijk (software & sales) and Durban (hardware & production).

Products

Obscape's custom-engineered PTM; Water Level Gauge (measures the height of the water in rivers, lakes or at sea), Time-Lapse camera (takes single-shot images), Rain Gauge (measures the amount of rainfall), Weather Station (measures a whole range of weather-related parameters, including temperature, wind, pressure and humidity) and Light-weight, flexible and reliable wave measurement buoy; allow you to observe real-time data from the field. The convenient map-based interface allows for easy integral management of the data, devices and operation anytime anywhere.



A NEW GENERATION WAVE MEASUREMENT BUOY BASED ON SOLID STATE SENSORS

Ocean wave measurements are an indispensable part of any MetOcean project. WaveDroid is based on recent advances in sensor and data technology, ensuring a light-weight, flexible, reliable and affordable wave buoy.

The BlockIII is WaveDroid's latest and premium buoy model. It will suit your wave observation needs on any project, regardless of location and budget. Accurate wave data makes its way to your desktop in real-time through a robust telemetry solution. WaveDroid BlockIII was designed to make your life easy: no receiver station needed, powered by ordinary alkaline batteries, a simple mooring solution, deployable by hand and transportable as check-in luggage.



KEY FEATURES

- Real-time data (GSM & Satellite)
- Bulk wave parameters
- Directional wave spectrum
- Online WaveDroid Data Portal
- GPS position & watch circle
- Low purchase & operational costs

- Compact & light weight
- Easy to deploy & service
- Suitable as check-in luggage
- Long battery life with standard alkaline batteries

MAIN APPLICATION AREAS

- Marine & Coastal engineering
- Oceanographic research
- Environmental monitoring
- Work compliance monitoring

ACCURATE, FULLY DIRECTIONAL WAVE DATA

WaveDroid BlockIII uses a combination of motion sensors and an electronic compass to measure the directional wave field with high accuracy. This yields the directional wave spectrum and all parameters that can be derived from it, such as the 1-dimensional energy-density spectrum and a range of bulk wave parameters (significant wave height, peak wave period, peak wave direction, etc.).



ALL ABOUT WATER LEVEL MONITORING

Obscape's Level Gauge delivers real-time water level measurements. It records the water level using a highly accurate radar sensor. Since the instrument is mounted above the water surface, deploying it in the field is easy.

The Level Gauge is suitable for application in natural as well as man-made water systems. Whether you are interested in tidal water level variations, stormwater runoff or storage basin volumes, the Obscape Level Gauge will suit your needs.



KEY FEATURES

- Accurate water level data
- Radar technology
- No underwater components
- Completely wireless
- Real-time data

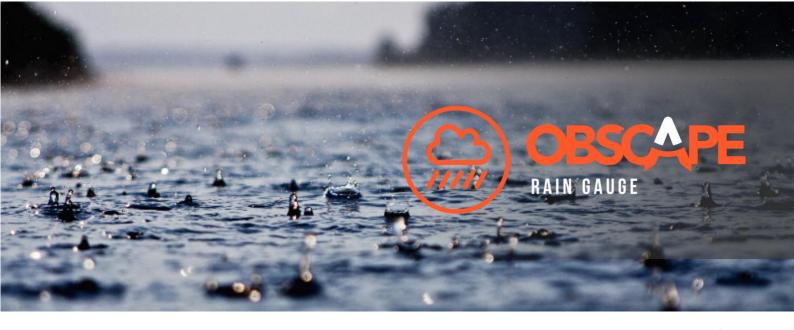
- Solar powered
- GSM telemetry (3G)
- Multiple mounting options
- Versatile data portal included

CONVENIENT WATER LEVEL MONITORING

Water level monitoring plays an important role in monitoring natural or man-made water systems. The Level Gauge is suitable for application in rivers, estuaries, canals, manholes and storage basins. The instrument measures the distance to the water surface using an industry-standard radar sensor. It is mounted above the water surface, which avoids costly and labour-intensive underwater operations. The 20 metre range of the Level Gauge will cover even the most extreme water level variations.

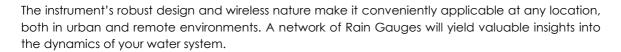
COMPLETELY WIRELESS

The Level Gauge is completely wireless. Power is supplied through built-in solar panels, while data are transmitted in real-time using a 3G GSM connection. Therefore, the Level Gauge is easy to install at any desired location within GSM coverage. There is no need to worry about access to mains power or router internet access. Its wireless nature makes the Level Gauge very suitable for monitoring of remote areas.



MAKE IT RAIN

Obscape's Rain Gauge delivers real-time rainfall measurements. Its industry-standard rain collector is connected to Obscape's Power and Telemetry Module to create a completely wireless real-time rain gauge.





KEY FEATURES

- Accurate rainfall intensity measurements
- Industry-standard rain collector
- 0.2 mm resolution
- Robust design
- Completely wireless

- Real-time data
- Solar powered
- GSM telemetry (3G)
- Multiple mounting options
- Versatile data portal included

CONVENIENT PRECIPITATION MONITORING

Rainfall is a key process in catchment management. It is an important source of water in natural water systems, but can also trigger flooding disasters. Rainfall intensity can vary strongly over time and at different locations in the water system. In order to determine the input of water into the system and to stay informed in disaster situations, a network of rain gauges is a basic necessity for any catchment monitoring programme. Obscape's Rain Gauge is the perfect instrument to provide you with the latest rainfall data at any location in the catchment area.

COMPLETELY WIRELESS

The Rain Gauge is completely wireless. Power is supplied through built-in solar panels, while data are transmitted in real-time using a 3G GSM connection. Therefore, the Rain Gauge is easy to install at any desired location within GSM coverage. There is no need to worry about access to mains power or router internet access. Its wireless nature makes the Rain Gauge very suitable for monitoring of remote areas.



YOUR EYES IN THE FIELD

Obscape's Time-Lapse Camera is a robust, fully wireless solution that delivers time-lapse images to your desktop in real-time. It allows you to have a look at your area of interest at any time of the day, wherever you are. Whether you are monitoring coastal erosion, progress of construction works, beach attendance or vegetation growth, time-lapse images can help you to collect the required data. Due to its wireless nature and compact housing, our Time-Lapse Camera is easy to deploy in any environment.

KEY FEATURES

- Up to 5MP resolution
- Real-time data (single images at interval)
- Completely wireless

- Solar powered
- GSM telemetry (3G)
- Multiple mounting options

Versatile data portal included COVERING TIME AND SPACE

Most measurement systems will either collect continuous point measurements (e.g. a pressure sensor) or sporadic spatial measurements (e.g. a GPS survey). The former do not reveal spatial variability, while the latter do not reveal fine-grained temporal variability of the observed environment. Time-Lapse cameras are your ideal partner to fill those gaps and achieve dense coverage of spatial and temporal dynamics, allowing you to keep a close watch on everything that happens in your area of interest.

COMPLETELY WIRELESS

The Time-Lapse Camera is completely wireless. Power is supplied through built-in solar panels, while images are transmitted in real-time using a 3G GSM connection. Therefore, the Time-Lapse Camera is easy to install at any desired location within GSM coverage. There is no need to worry about access to mains power or the internet. Its wireless nature makes the camera very suitable for monitoring of remote areas, such as beaches and nature reserves.



RAIN OR SHINE, WEATHER DATA DELIVERED TO YOUR OFFICE

Obscape's Weather Station supplies you with real-time weather data. This robust and user-friendly device combines Obscape's Power and Telemetry Module with an industry-standard weather sensor. Built-in solar panels and the GSM connection guarantee easy installation in any environment.

The weather is an important boundary condition for many natural processes. By adding the Weather Station to your environmental monitoring setup, you will not overlook the impact of wind, rain and other weather components in your area of interest.

KEY FEATURES

- Comprehensive weather data
- Completely wireless
- Real-time data
- Solar powered
- GSM telemetry (3G)Multiple mounting options
- Versatile data portal included

THE VALUE OF WEATHER DATA

Weather data are an indispensable resource for any environmental monitoring program. Wind, temperature, solar radiation and rainfall are the main drivers of environmental dynamics. Whether you are studying dune development, catchment management, stormwater runoff or ocean waves, everything starts with a thorough understanding of the local weather. Therefore, Obscape's Weather Station should be a standard asset of your environmental monitoring setup. It provides a wide range of weather parameters, including air temperature and pressure, wind speed and direction, rainfall, solar radiation, relative humidity and lightning.

COMPLETELY WIRELESS

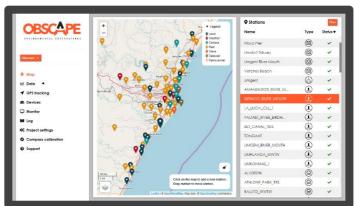
The Weather Station is completely wireless. Power is supplied through built-in solar panels, while data are transmitted in real-time using a 3G GSM connection. Therefore, the Weather Station is easy to install at any desired location within GSM coverage. There is no need to worry about access to mains power or the internet. Its wireless nature makes the Weather Station very suitable for monitoring of remote areas, such as beaches and nature reserves.



WHERE THE OFFICE MEETS THE FIELD

The value of real-time observations strongly depends on the ability to view and analyse them in real-time. Therefore, the Obscape Data Portal is one of our core products. An unrestricted license for the data portal is included free of charge with the purchase of all your Obscape equipment.

The Obscape Data Portal is your ultimate tool to unify the office and the field. Apart from offering data management functionality, the portal will also help you to monitor and maintain your devices operationally.



KEY FEATURES

- Real-time data
- Report generation
- Integral data management
- White labelling

- Data forwarding
- Maintenance log
- Monitoring alerts

INTEGRAL DATA MANAGEMENT

The Obscape Data Portal does more than just visualising your real-time observation data. It includes tools for data management and analysis, such as a variety of data downloads, flagging invalid data points, comparing data across all your measurement stations and viewing historic statistics of your dataset. Furthermore, you can register for periodic data reports in PDF format that are delivered to you by email.

OPERATIONAL MAINTENANCE

Carrying out operational monitoring entails more than just sitting back and watching the data roll in. Field operations are an indispensable part of your job, as instruments need to be deployed, recovered and at times maintained. Your Obscape equipment has been designed to be resistant, robust and low-maintenance. Additionally, the Obscape Data Portal offers several tools to monitor the status of you devices, issue automated email alerts, retrieve your GPS-tracked devices and document your field operations.



What makes us different

The Obscape philosophy helps us stand apart from the competition in these ways:

- You get what you pay for. Our products are affordable and low cost to operate. Also we don't charge you for any Portal Subscription or Licences.
- **Data integration**. All your measurement data from your Obscape sensors are available in the Obscape Data Portal; which is easy to manage, easy to use & will analyse all your environmental data at one central location.
- **Durable**. Our products are intended to function in harsh environments. Apart from withstanding the forces of nature, they were also designed to minimise the risk of theft or vandalism.
- **Flexibility**. Every project comes with its own special requirements. We offer the flexibility to modify our products case-by-case to make them compliant. These modifications can entail both software and hardware.

Examples of Applications

Coastal erosion

Coastal erosion is primarily caused by waves. The problem cannot be understood, let alone solved, without a good understanding of the wave climate along the stretch of eroding coastline. By utilising utilise our Wavedroid we can measure the waves and related parameters such as the water level and the wind (which generates the waves).

Catchment management

River catchment areas are vital to transport rain water to lakes & oceans. Excessive rainfall, long periods of drought or water pollution can cause problems throughout the catchment area, varying from flooding to scarcity of drinking water. Utilising our: Weather Station, Water Levels Gauge, Time Lapse Camera and Water turbidity quality forms the basis for integral management of the river catchment and its problems.

Habitat monitoring

Stormwater runoff and discharge of process water can threaten aquatic habitats through a degradation of the water quality. In order to monitor aquatic habitats and manage water quality problems, by employing our Rain Gauge, Weather Station, Water Quality and Water Level Gauge our observations gained are indispensable.

Structural design

Ports, breakwaters, wind turbines, oil rigs, levees, etc are built in, on or bordering natural water bodies; & are exposed to waves, tides, wind and currents. In order to design these structures so thay they can withstand the forces of nature, the availability of data from our Wavedroids regarding water levels, waves and wind prior to the start of the design process is highly important.

Workability monitoring

The structures mentioned above are often constructed with the help of ships, whether it be a crane vessel to lift wind turbines in place or a dredging vessel to dredge the entrance channel of a port. Most of these operations can only be performed if the waves, water level and wind stay within acceptable limits. Monitoring the workability conditions with the Wavedroid's measurement systems enables our clients to manage the construction process.