

# 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

- Real-time data up to 4G (upgradable to Satellite)
- 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.

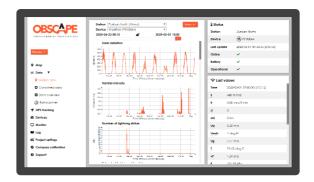
#### **COMPLETELY WIRELESS**

The Weather Station is completely wireless. Power is supplied through built-in solar panels, while data are transmitted in real-time using a 4G 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.

## **VERSATILE DATA PORTAL**

The value of real-time observations strongly depends on the ability to view and analyse them in real-time. Therefore, the Weather Station comes with a license for the Obscape Data Portal. The data collected by your Weather Station, as well as the data from any other Obscape device you own, are collected into the Data Portal. The Data Portal offers various options for viewing, managing and downloading your weather data, including the generation of PDF reports. It is your ultimate tool to unify the office and the field.





### **TECHNICAL SPECIFICATIONS**

DATA SPECIFICATIONS	
WEATHER PARAMETERS	Air temperature, solar irradiance, rainfall intensity, lightning strike count, lightning distance, wind speed, wind direction, gust wind speed, vapor pressure, atmospheric pressure, relative humidity
ADDITIONAL PARAMETERS	Sensor inclination, battery voltage, GSM signal strength, internal temperature
SAMPLING INTERVAL	5 – 60 minutes (user selectable)
STORAGE	On-board micro SD card

PHYSICAL CHARACTERISTICS	
COMPONENTS	Power and Telemetry Module (PTM) and Weather Sensor
WEATHER SENSOR	ClimaVUE50
PTM WIDTH	87 mm
PTM DEPTH	87 mm
PTM HEIGHT	200 mm
PTM WEIGHT	1 kg
WEATHER SENSOR DIAMETER	100 mm
WEATHER SENSOR HEIGHT	340 mm
WEATHER SENSOR WEIGHT	1 kg
MOUNTING POLE DIAMETER	50 mm (pole not included)

ELECTRICAL CHARACTERISTICS	
SOLAR PANEL CAPACITY	3W
BATTERY	1 single 18650 lithium battery
NOMINAL VOLTAGE	4.2 V

WEB-PORTAL SPECIFICATIONS		
REAL-TIME GRAPHS	Weather parameters and additional (status) parameters	
DOWNLOADS	Raw data (CSV format), Graphs (PNG), Reports (PDF)	
FORWARDERS	JSON API or HTTP post	
STATUS NOTIFICATION EMAILS	Online/offline, battery level, parameter threshold exceedance	

TELEMETRY SPECIFICATIONS	
COMMUNICATION MODE	GSM (4G with 2G fallback- region determine prior to order), upgradable Satellite (Iridium).
REAL-TIME DATA INTERVAL	5 minutes – 24 hours (user selectable)
REAL-TIME DATA	Weather parameters and additional (status) parameters
GSM DATA LOAD	Approx. 8 kB per message

DEPLOYMENT	
WEATHER STATION	Only suitable for deploy on a land based unsheltered environment with adequate exposure to sunlight, rainfall and wind.

PURCHASE SPECIFICATIONS	
WEATHER STATION	Purchase includes free web-portal license for the lifetime of the device, 2 x Std. PTM mounting brackets and 1 x SD card.
GSM COMMUNICATION	Optional GSM Global SIM card with 100 EUR of data credit available for purchase. Alternatively Micro SIM card and sufficient data credit to be arranged by user. Weather Station can also be run in offline mode (data saved to SD card).