

# MAKE YOUR SENSORS COME TO LIFE

Obscape's Power & Telemetry Module (PTM) is a highly convenient all-in-1 datalogger.

Its built-in solar panels and cellular modem will turn any 3<sup>rd</sup> party sensor of your choice into a plug-and-play real-time monitoring solution. With its wireless nature and rugged housing, the PTM was designed to function in both urban and remote environments.

The options for pairing external sensors are endless. It is up to your imagination what shape the PTM will take. From measuring water chemistry or air quality to observing noise level or soil moisture. The choice is totally yours.



#### **KEY FEATURES**

- Various communication protocols
- Completely wireless
- Real-time data
- Solar powered

- Real-time data up to 4G (upgradable to Satellite)
- Rugged design
- Multiple mounting options
- Versatile data portal included

### **REAL-TIME ENVIRONMENTAL OBSERVATIONS**

Environmental monitoring plays an important role in many fields. Whether you are reducing the impact of natural disasters, managing complex water systems, maintaining a marine protected area or growing crops, observations from the field will provide key information for executing your task in the most optimal way. Offline observations result in a significant time delay before you have access to your data. Getting a wired internet connection in place can be challenging and costly. Obscape's Power & Telemetry Module is the ultimate solution to address these challenges. It literally brings your sensors to life by providing them with solar power and real-time telemetry.

### **COMPLETELY WIRELESS**

The PTM is completely wireless. Power is supplied through built-in solar panels, while data are transmitted in real-time using a cellular data connection. Therefore, the PTM is easy to install at any desired location within 4G GSM coverage. There is no need to worry about access to mains power or router internet access. Its wireless nature makes the PTM very suitable for monitoring of remote areas.

## **VERSATILE DATA PORTAL**

The value of real-time observations strongly depends on the ability to view and analyse them in real-time. Therefore, the PTM comes with a free license for the Obscape Data Portal. The data collected by the PTM from the sensors of your choice, 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 observational data, including the generation of PDF reports. It is your ultimate tool to unify the office and the field.





### **TECHNICAL SPECIFICATIONS**

DATA SPECIFICATIONS	
PARAMETERS	3 <sup>rd</sup> party sensor data, battery voltage, solar voltage, atmospheric pressure, GSM signal strength, internal temperature
SAMPLING INTERVAL	5 – 60 minutes (user selectable)
STORAGE	Data portal & on-board micro SD card

WEB-PORTAL SPECIFICATIONS		
REAL-TIME GRAPHS	3 <sup>rd</sup> party sensor data, battery voltage, solar voltage, atmospheric pressure, GSM signal strength, internal temperature	
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	

PHYSICAL CHARACTERISTICS	
HOUSING WIDTH	87 mm
HOUSING DEPTH	87 mm
HOUSING HEIGHT	280 mm
HOUSING WEIGHT	2 kg (without sensor)

ELECTRICAL CHARACTERISTICS	
SOLAR PANEL CAPACITY	3W
BATTERY	1 single 18650 lithium battery
NOMINAL VOLTAGE	3.7 V
SENSOR COMM. PROTOCOLS	RS232, RS485, RS422, TTL, SPI, SDI-12, analog voltage, 4-20 mA current loop, pulse counting, Modbus

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	3 <sup>rd</sup> party sensor data, battery voltage, solar voltage, atmospheric pressure, GSM signal strength, internal temperature
GSM DATA LOAD	Approx. 8 kB per message

PURCHASE SPECIFICATIONS		
PTM	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. PTM can also be run in offline mode (data saved to SD card).	