

## **WORTH ITS SALT**

Obscape's CT Station is the ideal all-in-one solution for real-time conductivity, temperature and salinity measurements. It combines the robust Obscape Power & Telemetry Module with a low-maintenance toroidal CT probe.

Together they form a CT Station that is unchallenged in its ease of use.

Whether you are monitoring aquatic habitats, estuarine hydrodynamics or salt intrusion, the Obscape CT Station will suit your needs.



#### **KEY FEATURES**

- Accurate conductivity, temperature and salinity
- Toroidal sensor minimises bio-fouling
- Completely wireless
- Real-time data

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

### LOW-MAINTENANCE CONDUCTIVITY MONITORING

Where oceanic and inland waters meet, the interaction of fresh and saline water create an intriguingly complex environment. A salt wedge intruding into an estuary or harbour basin can start dominating the hydrodynamics and may have a significant impact on sediment transport. Diverse and unique habitats can form through the interplay of salinity, tides and waves. Observations of conductivity, water temperature and salinity form the starting point for getting insight into these natural dynamics.

While traditional CT probes suffer from rapid bio-fouling, compromising their accuracy and maintenance interval, the toroidal CT probe of Obscape's CT Station was specifically designed to minimise marine growth. Paired with our powerful and robust workhorse, the Power & Telemetry Module, conductivity data make their way to your desktop in real-time.

#### **COMPLETELY WIRELESS**

The CT 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 CT Station is easy to install at any desired location within GSM coverage. There is no need to worry about access to mains power or third-party internet access points. Its wireless nature makes the CT Station 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 CT Station comes with a license for the Obscape Data Portal. The data collected by your CT 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 conductivity data, including the generation of PDF reports. It is your ultimate tool to unify the office and the field.





# TECHNICAL SPECIFICATIONS

DATA SPECIFICATIONS	
PARAMETERS	Conductivity, water temperature, salinity, atmospheric pressure, battery voltage, GSM signal strength, internal temperature, sensor inclination, internal humidity
SENSOR RANGE	0 – 2,000,000 uS/cm
SAMPLING INTERVAL	5 – 60 minutes (user selectable)
STORAGE	On-board micro SD card

WEB-PORTAL SPECIFICATIONS		
REAL-TIME GRAPHS	Conductivity, water temperature, salinity, atmospheric pressure 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	

PHYSICAL CHARACTERISTICS	
COMPONENTS	Power and Telemetry Module (PTM) and toroidal CT probe
CT probe	Sensorex TCS3020
PTM WIDTH	87 mm
PTM DEPTH	87 mm
PTM HEIGHT	200 mm
PTM WEIGHT	1 kg
CT PROBE DIAMETER	52 mm
CT PROBE HEIGHT	119 mm
CT PROBE WEIGHT	1 kg
CT PROBE MOUNTING	3/4'' MNPT

ELECTRICAL CHARACTERISTICS	
SOLAR PANEL CAPACITY	3W
BATTERY	1 single 18650 lithium battery
NOMINAL VOLTAGE	3.7 V

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	Conductivity, water temperature, salinity and additional (status) parameters	
GSM DATA LOAD	Approx. 8 kB per message	

PRICING	
CT STATION	Including web-portal license and PTM mounting bracket
GSM COMMUNICATION	Micro SIM card and sufficient data credit to be arranged by user. CT Station can also be run in offline mode (data saved to SD card).

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