

# **External Solar Panel for Extreme Environments**

Obscape's External Solar Panel is the ideal solution for challenging solar conditions.

Obscape's External Solar voltaic urethane panels have a comparable low solar to high energy conversion, and been proven in extreme environments, making them ideal for applications in Arctic like conditions.

Whether you are monitoring in challenging overcast conditions, deploying in extreme latitudes, or mounting in an area of variable solar exposure , the Obscape External Solar Panel should suit your additional power needs.



## **KEY FEATURES**

- Waterproof (IP67)
- UV resistant (10+ year life)
- Durable and lightweight

- High efficiency monocrystalline cells: 19%
- Embedded screws for easy mounting
- ABS plastic post nuts included (4x)

## HIGH QUAILTY CONSTRUCTION

Each panel is individually hand potted in polyurethane. The urethane flows around and under each solar cell, completely encapsulating all the components in the solar panel.

- Urethane coating
- 3mm aluminium-plastic composite substrate

## CHALLENGING CONDITIONS

By converting light into energy, solar power is one of the most sustainable energy sources. It can be harnessed in all areas of the world and is available every day, however dependant on environment or locality factors, the solar panel sunlight to energy conversion rate can vary under different conditions like that of persistent shade, extreme weather, latitude, poor light, and solar orientation.

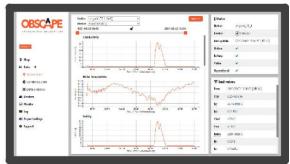
On fabrication, the External Solar Panel can be integrated into any Obscape PTM (Power and Telemetry Module), thereby empowering your monitoring requirements in any challenging solar conditions and in any location.

By integrating the Obscape External Panel, solar energy can still be collected on days during polar, overcast and inconsistent exposure to sun. This is because, the specialised solar panels are not entirely dependent on strong or consistent sunlight to effectively gather solar energy.

### VERSATILE DATA PORTAL

The value of real-time observations strongly depends on the ability to view and analyse them in real-time. Therefore, the Obscape External Solar Panel enables the PTM to transmit data in challenging sunlight conditions to the Obscape Data Portal. The data collected by your PTM integrated with the External Solar Panel, 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

## PRICING

ELECTRICAL CHARACTERISTICS		
Solar Panel Capacity	9 Watt 6 Volt Solar Panel	
Open Circuit Voltage	7.7V	
Peak Voltage:	6.5V	
Peak Current	1,420mA	
Peak Power	9.2W	
Power Tolerance	+/-10%	

MOUNTING	
Four embedded screws	4-40 thread, 0.46 cm long
Bracket and Cabling	Included

For maximum power output, orient the panel towards the  $\ensuremath{\mathsf{sun}}$ 

PHYSICAL CHARACTERISTICS		
CONSTRUCTION	Urethane coating 3mm aluminum-plastic composite substrate	
SIZE	22.1 x 25.7 x 0.5 cm	
WEIGHT	357 grams	
PTM INTERGRATION	Time Lapse Camera, Level Gauge, Flow Gauge, CT Station, Weather Station, Rain Gauge	







Mounting Bracket

