

## SUBSEA NODE

### OceanHub

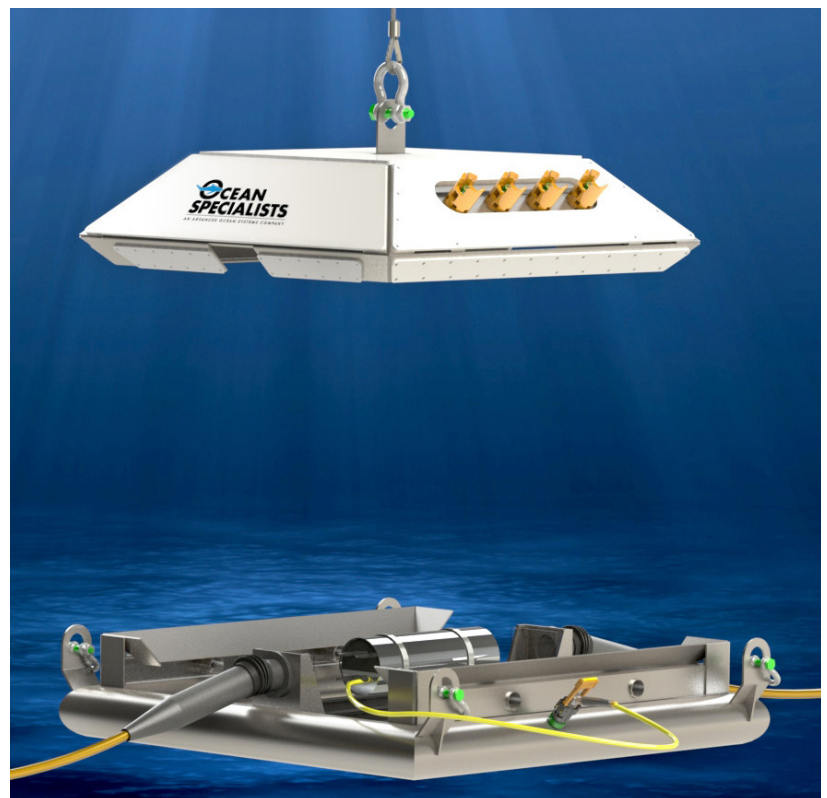
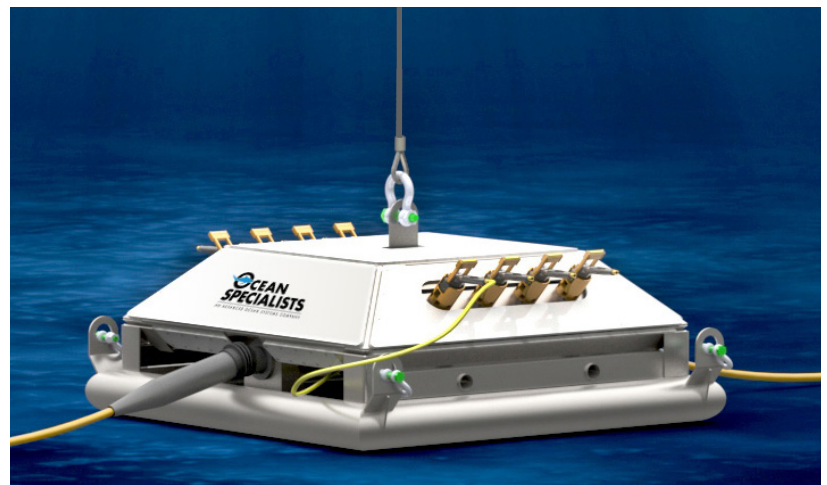
Subsea monitoring and control applications used by the science and energy industries require the dependable provision of data and power. OSI has developed OceanHub, a subsea data hub that enables common oceanographic sensors to be connected to a submarine cable, providing communications and power for long-term, in-situ observations.

OSI's OceanHub node combines proven components with common sensor packages, facilitating a rapid delivery and installation cycle. Consisting of a marine-grade aluminum frame and a titanium connector panel and pressure housings, the subsea node is operable to a depth of 3,000 meters, and features fully-managed industrial control devices with a web interface.

OSI's OceanHub is compatible with telecom cables, umbilicals, or PBOF via Field Installable Termination. The subsea node features ten instrument connectors, one input power connector, one input fiber optic connector and one sea earth connector.

### APPLICATIONS

- Scientific observatories
- Oil/gas field instrumentation
- Renewable energy
- Tsunami and seismic warning systems
- Port/coastal security



# SPECIFICATIONS

## CONNECTIONS

10 instrument connectors  
1 input power connector  
1 input fiber optic connector  
1 sea earth connector

## COMPATIBILITY

Telecom cables, umbilicals, or PBOF via Field Installable Termination

## INPUT POWER

1,200 to 1,800 VDC at less than 0.5 Amps  
Optional constant current power at 1,020 mA

## OUTPUT POWER

5 connectors with 24 VDC  
5 connectors with 12 VDC  
360 Watts maximum  
Other configurations upon request

## INSTRUMENT COMMUNICATIONS

4 connectors with 10/100BASE-T Ethernet and analog video  
6 connectors with RS-232/RS-422

## UPSTREAM COMMUNICATIONS

2 x 1000BASE-ZX Fiber Optic Ethernet

## PHYSICAL DIMENSIONS

2.4 m x 2.4 m x 1.93 m  
Weight in air: 1,160kg  
Weight in water: 680kg

## MATERIALS

Pressure housings: Titanium  
Connectors: Titanium

## OPERATING DEPTH

Standard: 3,000m  
Optional: 1,000m

## RELIABILITY

25 year design life with 5-10 year refurbishment interval  
50,000 hour MTBF

## CONTROL AND MANAGEMENT

Communications: Web interface and SNMP  
Power: Fully managed industrial control devices with web interface.

## ABOUT OCEAN SPECIALISTS (OSI)



OSI is a leading subsea cable consulting and project management firm for telecommunications network solutions. With extensive hands-on experience in the commercial & economic feasibility analysis and the planning, design, implementation and management of subsea fiber optic networks, OSI helps clients to ensure their subsea cable network is designed in the most technically sound, cost efficient way possible.