



DataSheet – OSIS SensorPack

OSIS SensorPack - oil spill data acquisition

The **OSIS SensorPack** generates raw data for identification, tracking and quantification of oil spills within 2.5 nautical miles from the installation site. The SensorPack contains active and passive microwave sensors, providing data for precise surface area and thickness estimate of an oil layer on the sea. The SensorPack is linked to the Onsite Viewer as well as the Master Unit.

Features

- 24 hour oil spill data acquisition
- Oil spill tracking range: 2.5NM
- Oil spill quantification range: 0.5NM
- Oil spill thickness indication: 0.1 - 1.5mm
- Connected to Onsite Viewer and Master Unit using Ethernet connection

Scan Patterns

- Elevation angles: 45° - 86°
- Azimuth angles: 360°
- Wave Compensation - Roll and pitch: $\pm 10^\circ$
- Programmable Surveillance Patterns

General data

- Dimensions (mm): 1200 x 1200 x 1400
- Weight: 85Kg
- Operating temp.: -25 - +55 Degrees Celsius
- Operating humidity: 100%
- Operating wind speed: 0-15 m/s
- Structural wind speed: 65 m/s
- Protection: IP65
- Certifying Authority: DNV, Lloyds or GL
- CE approved
- Input: 100 - 240VAC and 3BAR air supply
- Output: Wired or Wireless Ethernet
- Power consumption (Standard): 500W
- Temperature extension modules available





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Active sensor

- Antenna type: Waveguide slot
- Antenna size: 550mm
- Antenna beamwidth: 4 degrees horizontal and 20 degrees vertical
- Antenna polarisation: Vertical
- Antenna rotating speed: 20-50rpm
- Frequency: 9410Mhz \pm 30Mhz
- Peak output power: 4kW nominal
- Pulse length and repetition rate: (0,08uS, 2100Hz), (0,3uS, 1200 Hz) and (0,8uS, 600Hz)
- Sampling rate: 19Mhz
- Range resolution: 25 m
- Line resolution: 120 lines (3 degrees)

Passive sensor

- Antenna type: Offset
- Antenna size: 600mm
- Antenna beamwidth: 1.2 and 0.5 degrees
- Antenna polarisation: Horizontal
- Frequency: 34Ghz and 90Ghz
- Bandwidth: 400Mhz and 2000Mhz
- Receiver sensitivity (theoretical): < 1K
- Measurement accuracy: 90% (theoretical) and 75% (reference conditions)

