

# MIROS DELIVERS DIGITISED, SEA STATE DATA FOR BETTER DECISION MAKING AND OPTIMISATION IN THE TOUGHEST CONDITIONS



In an industry operating under tough weather conditions offshore, the ability to enhance operational weather windows, ensure the safety of personnel and closely track asset integrity is paramount.

Miros' expertise lies in providing accurate, real-time measurements of local environmental conditions and providing that information to all relevant stakeholders, on- or offshore. Our portfolio of dry, Cloud-integrated sensors makes the costly maintenance associated with wet equipment a thing of the past.

## Data Availability

**Operational Decision Support:** Putting the right data in the hands of the right decision maker at the right time is key during weather-sensitive operations. With Miros' IoT sensors and seamless Cloud services, users have real-time operational decision support wherever they are. Access can also easily be given to third parties involved in the operation (vessels, rigs, on-shore operation centres, etc.).

**Post-Operation Processing:** With Miros Cloud, all data is securely stored for quick and easy access or download to facilitate further analysis such as post-operation and incident analyses, planning of future operations or long-term asset integrity assessments.

**Integration with Third-Party Data:** Miros Cloud enables easy integration with any third-party weather sensors on site, weather forecasts, tidal tables, AIS and other relevant data sources to build a holistic decision-support system in the Cloud.

## Data Quality & Reliability

**Remote Sensing:** Hundreds of customers in the oil and gas sector have benefited from the wider weather windows, increased performance and enhanced safety Miros' sensors deliver. Miros' remote sea state sensors provide accurate data uninhibited by precipitation, sea spray or fog, with a proven track record in the harshest conditions.

**Certified Accuracy:** Miros' wave sensors have been certified by reputable certification agencies and thoroughly tested against competing brands and technologies by independent third parties. In addition, the Miros WaveFinder is the only alpha-factor approved wave-monitoring instrument on the market.

Miros' Cloud-based technology for wave and current monitoring during offshore operations gives you decision-making solutions that provide everyone involved with access to real-time and historical data, anytime, anywhere, and to any device.



### Dramatically Lower Cost of Ownership

**Plug & Play:** Miros' portfolio is based on stand-alone sensors with embedded processing and browser-based GUI for set-up and configuration. No integration or external processing is needed, and installation and commissioning is simply actioned by adding power and Internet. Miros' sensors do not need calibration at commissioning.

**Dry Sensors:** With Miros' dry sensor portfolio no equipment is submerged in water and physical maintenance is reduced to a minimum, resulting in a 60-80% cost savings compared to traditional wave buoys<sup>1</sup>.

**Internet of Things:** Being true IoT sensors, diagnostics, troubleshooting and SW-upgrades can be done remotely, eliminating expensive offshore trips or the need to send equipment onshore.

For more than 35 years, Miros has delivered accurate, reliable sea state data to some of the world's largest companies in the oil and gas industry:



<sup>1</sup>Based on annual buoy rental cost of USD 170,000 and a 4-hour average deployment and retrieval time.