

Miros unveils dual sensor for measuring directional wave spectra



Ocean insights leader Miros recently unveiled WaveFusion, a groundbreaking dual sensor designed to measure directional wave spectra in response to the offshore wind industry's demands.

WaveFusion enhances data performance and reliability by combining footprints and intelligent processing algorithms. It eliminates the shadowing effect caused by

structures, providing a better understanding of sea state. WaveFusion amalgamates downward-looking and remote-sampling measurements to accurately assess waves near a wind turbine. It covers directional and non-directional waves lasting from one to 30+ seconds at a distance of approximately 200 metres.

Miros introduced [Data Explorer](#), a solution for analysing real-time and historical data from offshore wind sites. WaveFusion seamlessly integrates into Data Explorer, providing a user-friendly and comprehensive tool. This system helps operations and maintenance teams reduce energy consumption and emissions from cancelled offshore operations due to weather uncertainties. It supports organizations in achieving their environmental and sustainability objectives.

Insights into the state of the sea

Serving as the inaugural addition to Miros' next-generation wave radar series, WaveFusion offers enhanced visibility and comprehensive insights into the sea state, particularly in critical maritime operations and shallow waters, regardless of weather conditions. By leveraging 13 sample areas located at varying distances from the turbine, this sensor delivers real-time and accurate data measurements.

Jonas Røstad, chief commercial officer at [Miros](#), commented: "One of the key challenges facing offshore wind operators is accurately measuring directional and non-directional waves around a wind turbine. We are pleased to now have a great sensor to offer. We think the combination of measuring both at the spot of interest and further away from the structure to avoid interference and reflections and choosing the best and most relevant samples during processing will give the most reliable data in all sea states."

Røstad further emphasized Miros' commitment to innovation and ensuring customers' access to cutting-edge technology. The company continually challenges its technology, materials and target markets, while upholding an unwavering dedication to maintaining the highest standards of quality. Customer satisfaction remains at the core of Miros' business philosophy.

WaveFusion is available to customers through Miros' Sea-State-as-a-Service, a subscription-based model that grants access to data and 24-hour technical support without the need for equipment purchase, insurance or maintenance.



WaveFusion was developed in response to industry feedback, aiming to provide a reliable, high-quality sensor that accurately measures waves at various locations around a wind turbine. (Image courtesy: Miros)