

# Enhancing Dynamic Positioning (DP-2) performance with reliable wind data

# VAISALA

## Case Study



### The client:

Praxis Automation  
Far East Pte Ltd

### Vaisala provided:

WXT532 Wind speed and  
direction sensors

Praxis Automation Far East, regional subsidiary of Netherlands-based Praxis Automation Technology, is a global leader in ship automation, electrical propulsion, navigation and dynamic positioning (DP) systems. As part of a major fleet modernization project with their client Rawabi Vallianz Offshore Services (RVOS), a leading offshore support provider in the Middle East, Praxis selected Vaisala WXT532 ultrasonic wind sensors to ensure their advanced DP-2 systems deliver optimal performance in demanding offshore conditions.

The fleet modernization program covers 59 offshore vessels, including 20 new builds, making it one of the most ambitious DP-2 upgrades in the region. Vaisala's wind sensors will be integrated across all DP-2 systems – bolstering the reputations of both RVOS and Praxis Automation Far East for technological excellence and setting a new benchmark for offshore support services in the MENA region.

### THE CHALLENGE:

#### Ensuring safe and reliable DP operations

Dynamic positioning systems are critical for offshore operations, allowing vessels to maintain their position without the use of anchors. For DP-2 class vessels, redundancy and precision are vital, with accurate environmental data serving as the foundation for safe and efficient operations.

As part of the RVOS' vision to embrace new technology that minimizes periodical maintenance, lower operating costs but upkeeps maximum utilization of DP2 equipment offshore, Praxis Automation Far East and partners stepped up to the challenge with the cutting-edge new technology.

## THE SOLUTION:

### WXT532 integrated with Praxis DP-2 systems

To meet this challenge, Praxis Automation Far East turned to Vaisala and integrated the Vaisala WXT532 ultrasonic wind sensor into their DP-2 solutions. Each vessel will be equipped with three WXT532 wind sensors to ensure redundancy and uninterrupted data delivery in all offshore conditions. The compact sensors provide continuous, real-time measurements of wind speed and direction, which are essential inputs for DP system algorithms.

The organization chose Vaisala technology for its proven track record in delivering weather sensors that perform reliably in harsh marine environments and comply with international IEC standards. WXT532 provides exceptionally accurate and reliable wind speed and direction data in a compact design, suited for offshore use. Its solid-state ultrasonic wind measurement, with no moving parts, increases durability and reduces maintenance needs. It can easily be integrated into DP-2 systems to deliver continuous wind information that supports vessel station-keeping, operational safety, and cost efficiency by reducing downtime.

## THE BENEFITS:

### Safety, efficiency and confidence for offshore operations

Deploying WXT532 sensors across the RVOS fleet has delivered measurable benefits. Accurate and continuous wind data enables DP algorithms to perform at their best, ensuring vessels maintain position safely and efficiently even in challenging offshore conditions.

By modernizing its fleet with latest technology and DP-2 systems supported by Vaisala technology, RVOS with the help of Praxis Automation Far East has significantly improved operational safety, reduced maintenance demands compared to older sensor systems, and enhanced overall fleet efficiency. The project also positions RVOS as one of the largest operators of fully DP-2-equipped vessels in the Middle East, strengthening its competitive advantage and reinforcing its reputation with key clients in the offshore energy sector.

*“Accurate and continuous wind data is essential for reliable DP-2 performance. Equipping the RVOS fleet with Vaisala’s WXT532 ultrasonic wind sensors set a new standard for DP-2 operations in the region. The combination of accurate wind data and advanced automation systems strengthens both safety and efficiency at sea for our clients.”*

*Adi Wu Yunhai  
Operation Director, Praxis Automation Far East  
Pte Ltd*

## Why Vaisala?

Weather and environmental insights are the greatest catalysts for successful maritime operations— from sensors to systems and digital services, Vaisala provides actionable insights that empower stakeholders to confidently meet challenges and harness new opportunities.

Our globally trusted maritime weather solutions enable remarkable efficiency gains, digital transformation, the protection of people and investments while supporting sustainable and responsible operations.

We are scientists and explorers driven by passion, relentless curiosity, and the desire to create a better world. Backed by nearly 90 years of unmatched scientific leadership, our solutions increase maritime weather awareness and drive innovation.

