

# Buoy Lidar System Molas NX5

The buoy lidar system is a floating wind lidar system equipped with Molas B300M. It integrates the self-developed attitude compensation algorithm to ensure high-precision measurement of wind speed in motion attitude. The whole system has high integration, high wind measurement accuracy, stable and reliable data transmission, and can run for more than five months under no wind and no light conditions.

The Molas NX5 buoy lidar system has accumulated rich experience in deployment and has withstood the test of many extreme offshore weather such as typhoons. It can further promote the technology of floating wind turbines in terms of economy, convenience of construction and environmental adaptability. The upgrade will better facilitate the development of offshore wind power.



## Product Advantages

- **Motion compensation:** Industry-leading data accuracy based on self-developed patented algorithms
- **Reliable power supply:** The system does not need continuous operation and maintenance, ensuring high data availability
- **Robustness:** Built-in anti-collision, anti-water and other disaster recovery design
- **Redundancy backup:** Redundant backup of core sensors, support dual lidar
- **Data Security:** All data encrypted storage and transmission

# Performance Parameters

GPS	
Direction	0-360°
Orientation Accuracy	0.09° (2 meter baseline)
Horizontal Accuracy	0.5米 (SBAS)
Communication System	
Satellite	Beidou short message*2, optional broadband satellite module
Move	2G/3G/4G * 1
Wi-Fi	2.4G/5G *2
Data Collection	
Industrial server	2
Interface	Multiple redundant serial ports, Ethernet interfaces
Storage	All data can be stored for at least 3 years, and support expansion
Optional Sensor	
Wave, current, water temperature, salinity, water depth Other sensors can be configured according to customer requirements	

Floating Body	
Diameter	5 Meter
High	9 Meter
Weight	13.5 Ton
Net Buoyancy	10 Ton
Structure	Multi-cabin design
Mooring System	
Water Depth	8-250 meters
Anchor	Cement Anchor, 10 Ton
Chain	JT/T 100-2005 chain, support double chain anchor,The mooring system needs to be reviewed and designed separately according to the site characteristics.
Electricity Supply	
Battery	5 groups
Fan	2 sets, optional
Solar Energy	Multiple solar panels
The Fuel Cell	2 groups, for simultaneous operation of dual lidars (optional)

# Application Scenarios

Offshore Wind Farm Planning Site

Wind speed and wind direction data collection

Meteorological and hydrological data collection

