

SPECIFICATIONS

WindSentinel™

Offshore Wind Resource Assessment Buoy

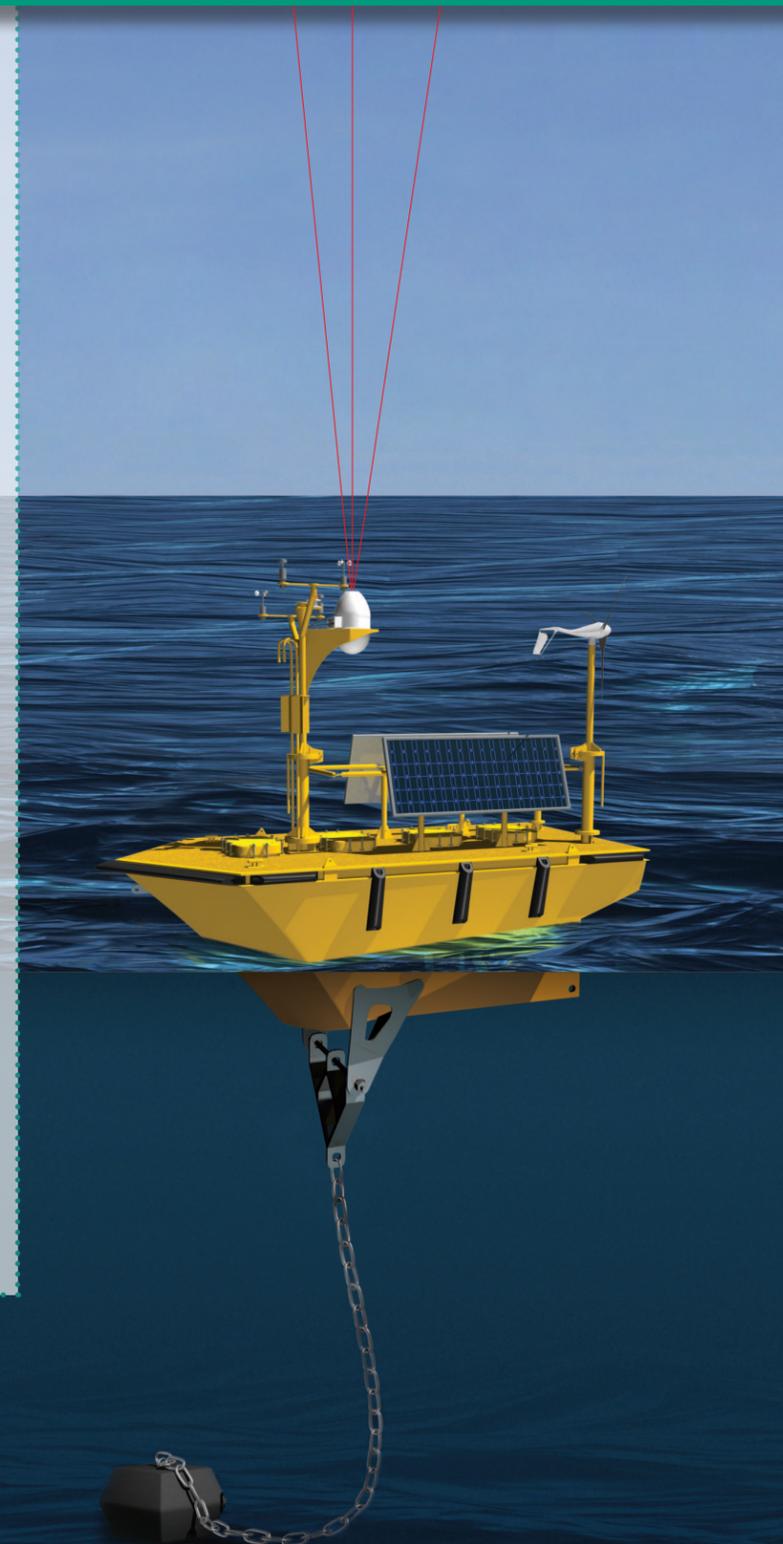
LIDAR SPECIFICATIONS	
GENERAL SPECIFICATIONS	
OPERATING TEMPERATURE	-40°C to 55°C
SYSTEM POWER REQUIREMENTS	110 VAC at 250 Watts Max.; 0°C - 55°C 110 VAC at 450 Watts Max.; -40°C - 0°C
OPERATION	Unattended, 24/7
REMOTE SUPPORT	Remote Access for Maintenance and Configuration
DATA OUTPUT FORMAT	Customer defined
FUNCTIONAL SPECIFICATIONS	
OPERATIONAL WAVELENGTH	1550 nm
MINIMUM WIND SPEED	0 m/s
MAXIMUM WIND SPEED	36 m/s (plus)
SENSING RANGE	50 to 300 meters
NUMBER OF SIMULTANEOUS REPORTING HEIGHTS	Customer Defined
RANGE GATE DEPTH – EXPECTED	±20 meters (adjustable)
WIND SPEED ACCURACY	< ± 0.2 m/s @ 1 Hz data rate
VECTOR ORIENTATION	360° in vertical plane (± 180 degrees)
RELATIVE ANGULAR ACCURACY	±0.7° @ 13 m/s speed, 1 Hz
EYE-SAFETY	Class 1 Eye-Safe

NOMAD SPECIFICATIONS	
HULL CONSTRUCTION	Welded Aluminum. Four water tight compartments for electronics, power and sensors. Aluminum superstructure and stainless steel substructure are bolted onto the hull.
FINISH	marine grade epoxy
WEIGHT	5200 kg (not including ballast or mooring)
DIMENSIONS	6m (L) x 3.1m (W) x 9m (H)
MOORING	Inverse catenary, chain, semi-taught, or false bottom.
NAVIGATION LIGHT	IALA standard lamp and automatic multiple bulb changer
POWER	Primary batteries, solar supplemented primary batteries, fully solar powered, onboard fuel cell, onboard generator.
POSITION	GPS package indicates whether buoy is on-station

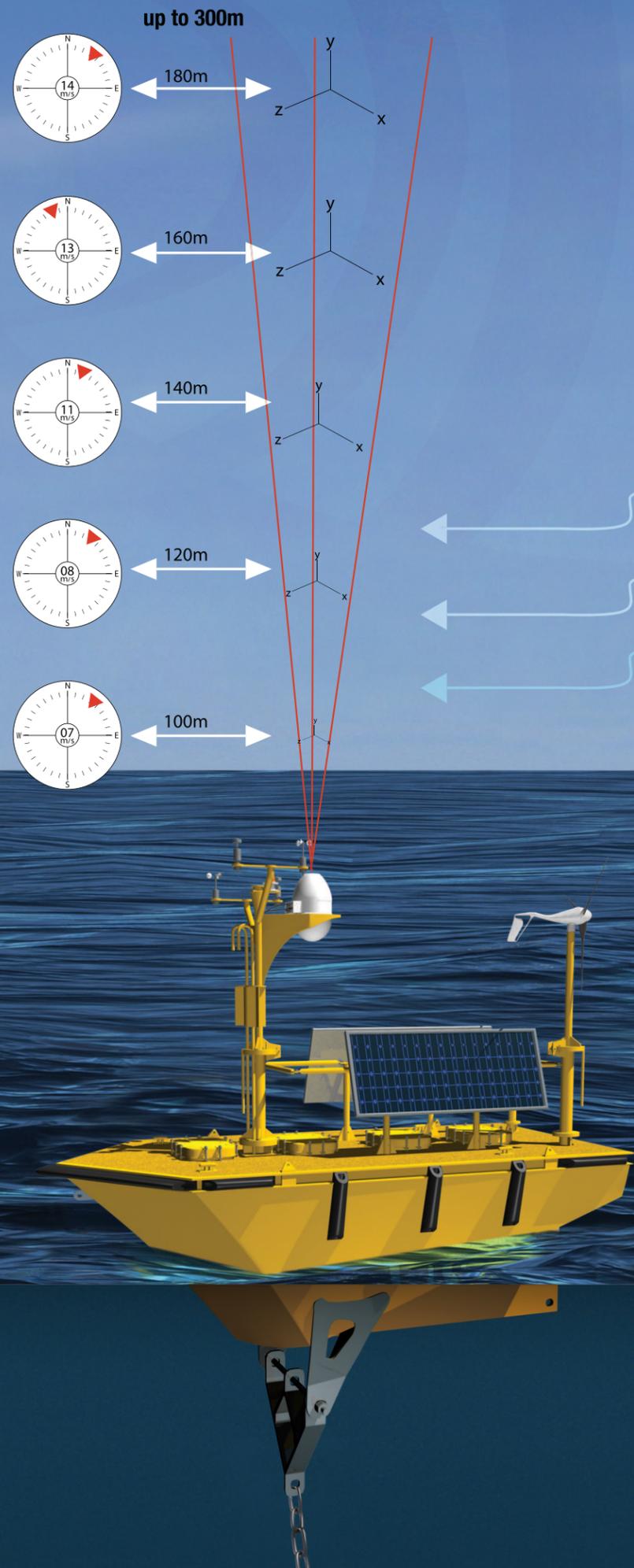
AVAILABLE TELEMETRY	
•	Globalstar
•	Cellular (CDMA, GPRS, 3G, etc)
•	Iridium
•	Inmarsat
•	VHF/UHF
•	GOES
•	ARGOS

FEATURES & BENEFITS:

- Perform, turbine-height, offshore wind resource assessments from a buoy
- Lower the cost of offshore wind resource assessments
- Reduce time to market
- Improve the quality and accuracy of wind data
- Superior solid state laser technology
- Continuous two-way remote access to your systems and data in real time
- Portable and reusable
- Eliminate permit, environmental assessment and licensing requirements associated with Met Tower construction
- Deploy multiple buoys in networked arrays for the cost of one offshore Met Tower



HOW IT WORKS



How will YOU compete for YOUR share of the Wind

The WindSentinel™ delivers real competitive advantage.



WHAT THE WINDSENTINEL™ CAN DO FOR YOU

The WindSentinel™ is the world's first wind resource assessment buoy capable of measuring wind data at heights of conventional offshore wind turbines.

At the heart of the WindSentinel™ is the Vindicator® Laser Wind Sensor, a next generation solid state laser designed to accurately measure wind from moving platforms. Using three fixed beams this laser wind sensor can take single focused or multi-point measurements up to a maximum range of 300 meters. The resulting wind data is acquired, processed and transmitted via a selection of telemetry options through the AXYS WatchMan500™ controller. These components have been engineered into the AXYS Nomad™ buoy – a well proven proprietary platform designed to perform in extreme offshore marine environments.

The WindSentinel™ is the faster and more accurate way to gather offshore wind data across multiple locations for less money. Deploy a WindSentinel™ to perform wind resource assessments without the high costs and bureaucratic hurdles associated with fixed marine met tower construction.

For the cost of a single fixed met tower, and in substantially less time, you can deploy a networked array of WindSentinel™ buoys over one or all of your potential Wind Farm sites, allowing you to be more agile and responsive throughout assessment, financing and operations phases.

Deploy a WindSentinel™ to:

- Lower the operating and capital costs associated with wind resource assessment
- Gather data at multiple sites simultaneously
- Reduce permitting, licensing and red tape
- Increase the speed with which your project gets funding
- Lower your time to market



WindSentinel™

An Offshore Wind Resource Assessment Buoy
You Can Bank On

