Zephyr buoy

Real-time transmission of currents, waves, and other parameters, with expert data assistance



The Zephyr buoy is a lightweight and easy-to-deploy buoy equipped with a customizable sensor suite to deliver high-quality, real-time data on currents and waves with the option for meteorological parameters. The Zephyr uses Nortek's Aquadopp ADCPs to provide high-accuracy current measurements, and offers flexibility to measure additional parameters if needed. Backed by Nortek's team of experts who offer daily data quality control and on-demand support, the Zephyr buoy is a flexible choice for those requiring reliable information in a smaller and more versatile package. The Zephyr buoy is available as a product or as a service for data provision.

Highlights

- 24/7 real-time data transmission
- High reliability and accuracy
- Lightweight and easy to deploy
- Customizable sensor packages
- Available as a product or service for data provision

Applications

- Landing and connection of wind farm cables
- Operational weather window decision making
- Aid to navigation in port areas
- Feasibility studies for designing infrastructure
- Hydrodynamic sedimentation studies
- Integration into numerical models for weather forecasts

Technical specifications

Dimensions*	
Length	2.35 m
Diameter	1.05 m
Weight (fully equipped)	130 kg

*Buoy dimensions are subject to change with various customization options. See drawings for details.

Data transmission	
Real-time transmission options	Cellular network, Iridium

Current profiles**	
Aquadopp Profiler 2 MHz range	10 m
Aquadopp Profiler 1 MHz range	25 m
Aquadopp Profiler 600 kHz range	40 m
Aquadopp Profiler 400 kHz range	90 m

Current profiles**

Aquadopp current meter	Single point

**Current profiling capabilities may not be exactly the same when used on a buoy. Conditions will affect range and other parameters. Get in touch with Nortek to determine which instrument is appropriate for your application.

Additional parameters and sensors***

Directional waves	Internal motion sensor
Meteorological parameters	Gill weather station
Temperature / salinity	CTD
Other parameters	On demand
Top marks	Flash light, radar reflector
Power	4 solar panels (60W) + battery
Data storage	Internal data logger and server database through real-time transmission