

# Harnessing the Wind

/ VAISALA WEATHER OBSERVATIONS FOR YOUR WIND FARM



**VAISALA**

# Observing the Atmosphere for Your Wind Farm Operations



With over 70 years in the weather measurement business, at Vaisala we understand the importance of weather and the impact it can have on your operations. Our sensor technologies, systems and services are designed to accurately monitor weather conditions, increase safety and stability, and optimize economic operations. We provide full weather support and serve as the atmospheric observer for your wind farm – from planning and development through its operational life.

## Performance Grade Sensors and Systems

Using our field-proven technologies, wind farm operators can make better

decisions and get the most value from their investment. Vaisala understands the complexity and variety of measurements that wind farm operations require. We provide a variety of high quality sensors, observation systems and services, including:

- Lightning data and warnings
- Ultrasonic and mechanical anemometers
- Visibility and precipitation sensors
- Temperature and relative humidity sensors
- Barometric pressure sensors
- Full weather stations
- Maintenance and services
- Consultation

## Maximize Your Operations

At Vaisala, we have a passion for weather and draw on our core scientific competence to develop the most advanced sensing technologies in the world. Our weather instruments reduce life-cycle costs for wind farms because our sensors last longer, require less maintenance, and supply accurate data every time, especially during adverse weather when you need it most. Our full weather stations allow you to monitor conditions throughout the wind farm, help you make decisions, and ultimately reduce operating costs. You can further maximize your wind farm operations by using our performance grade sensors and systems to validate turbine



# Understanding Your Needs



performance and improve generation forecasting.

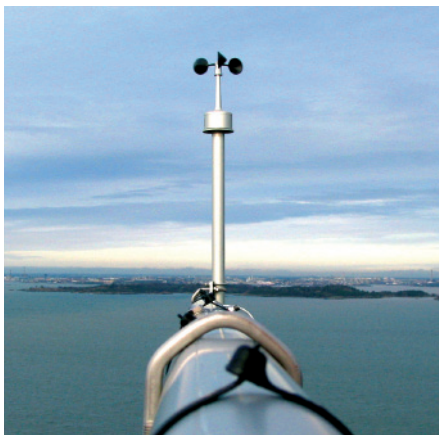
And when it comes to protecting life and property, you can count on us to provide accurate lightning information for your operations. If the performance of a turbine is not at its optimal level, a lightning strike may be the cause. We offer lightning software specifically designed to assist operators in determining whether or not a turbine has been affected by lightning. Our software will allow you to be proactive without having to inspect the turbine on-site. Further, we can supply lightning data and services that will allow you to provide advance warning to maintenance crews and protect your assets.

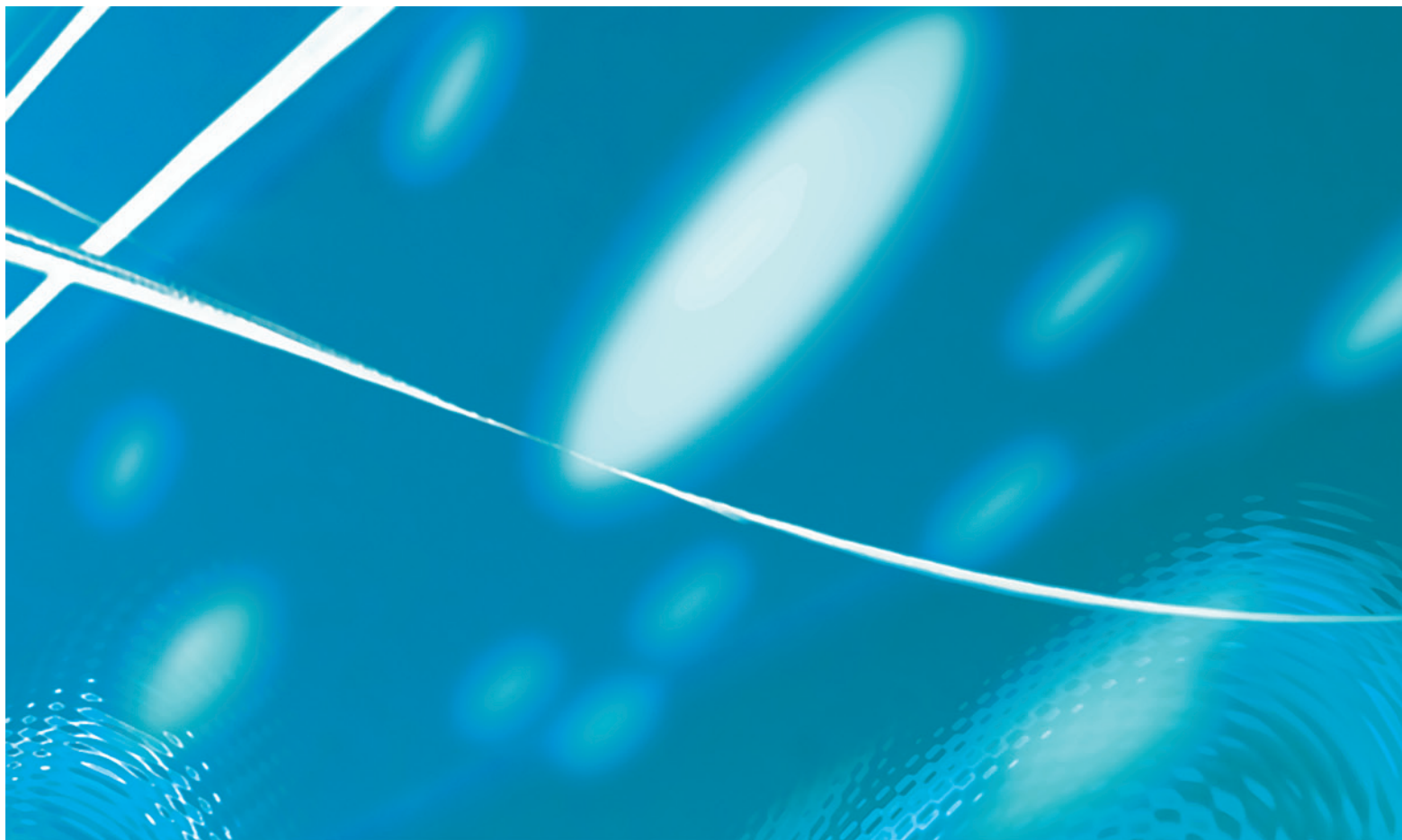
From wind sensors, to lightning data for property and safety, to humidity and pressure measurements inside the turbine, as well as the data logger that processes all the information we are there for you throughout the life of the wind farm – not just the warranty period.

## Vaisala – the Optimal Partner for all Your Weather Needs

As a leader in weather and industrial measurement solutions in over 120 countries around the world, Vaisala delivers reliable weather information and equipment to customers who make weather-critical decisions, assuring energy efficient, high quality operations across a range of industries. As a company we strive to contribute to a better quality of life by providing a comprehensive range of innovative products and services. We provide solutions that allow our customers to fully understand and manage the impact weather has on their operations, reduce the uncertainty weather can bring, and make better decisions for their business.

For additional information on products and services for our wind farm operations offering, please visit [www.vaisala.com/energy](http://www.vaisala.com/energy)





# VAISALA

[www.vaisala.com](http://www.vaisala.com)

For more information, visit  
[www.vaisala.com](http://www.vaisala.com) or contact  
us at [sales@vaisala.com](mailto:sales@vaisala.com)

Ref. B211148EN-A ©Vaisala 2011  
This material is subject to copyright protection, with all  
copyrights retained by Vaisala and its individual partners. All  
rights reserved. Any logos and/or product names are trademarks  
of Vaisala or its individual partners. The reproduction, transfer,  
distribution or storage of information contained in this brochure  
in any form without the prior written consent of Vaisala is strictly  
prohibited. All specifications — technical included — are subject  
to change without notice.