

Vaisala Lightning Integrator for Wind Energy

High-quality, accurate historical lightning data API to support your incident analysis tools



Key benefits

Reduced operational downtime

Lightning Integrator lets you analyze detailed storm information in historical and near real-time, even when your asset may have just been compromised. You can make better-informed decisions to maximize productivity by dispatching people to the right asset at the right time.

Greater protection from liability

Dependable data about lightning type, location, and intensity can help determine the cause of a particular incident and help in designing a preventative plan of action.

Increased asset reliability

Lightning Integrator gives you access to extensive storm data near your assets — even those spread across multiple geographic regions — to improve your emergency, maintenance, and operational asset management.

Modern data, modern operations

Lightning Integrator uses data from the Vaisala-managed Global Lightning Dataset (GLD360) and National Lightning Detection Network (NLDN). No other networks are as reliable or cover the globe with such resolution and accuracy. Wherever you are, this outstanding data is at your fingertips.

Enhanced reporting

The more accurate and comprehensive the lightning data you input into your system, the better analysis your incident report delivers.

Vaisala Lightning Integrator, part of our Xweather family of subscription based products, delivers quick and easy access to the most trustworthy real-time and historical lightning data for incorporation into your weather investigation systems through an easy-to-use API. Adding quick, easy, seamless access to the ever-expanding repository of current and historical Vaisala lightning data improves investigation efficiency, and enhances your report credibility for management, legal teams, and external audiences.

Incorporating Lightning Integrator into your analysis and reporting tools will ensure you'll have confidence in your results. Our highly accurate, precise data helps you justify downtime and investigation or repair projects, review operational procedures, and identify potential damage to wind farm assets. It is the dependable data boost most renewable energy organizations need to improve safety, forecast models, efficiency, and their asset reliability.

Lightning Integrator at a glance

Applications

- Incorporate comprehensive lightning information into safety and planning systems to help improve asset management before, during, or after a weather threat or incident.
- Review potential risks for lightning damage to enhance the effectiveness of asset protection and maintenance planning.
- Support power generation reliability by integrating accurate and complete lightning data into forecast models, GIS tools, and asset management systems.
- Build robust incident reporting through a simple, easy-to-query API that allows access to highly accurate lightning information for use in incident assessment, reporting, or even displaying in an app.
- Evaluate asset damage or failure through the lens of near real-time and historical hazardous strike information.

Key features

Dependable data with easy access to all the lightning events that occurred within your specified area and time period, with identified lightning characteristics that are accurate and reliable.

Simple API integration lets you seamlessly feed comprehensive real-time and historical lightning data into your analysis platform.

Extensive lightning information including event type, cloud-to-ground stroke or intra-cloud pulse event, date and time (UTC with milliseconds accuracy), precise latitude and longitude, peak current (kA), polarity (+/-), and much more.

API service offers access to lightning data from 2016 to as recent as 1 minute behind the present time.

Comprehensive data access without the need for lightning detection sensors — saving real estate, time, maintenance, and operational costs.

Includes Strike Damage Potential, providing accurate data on the particular lightning strikes that have greater potential to cause damage or start a wildfire.

Why Vaisala for renewable energy?

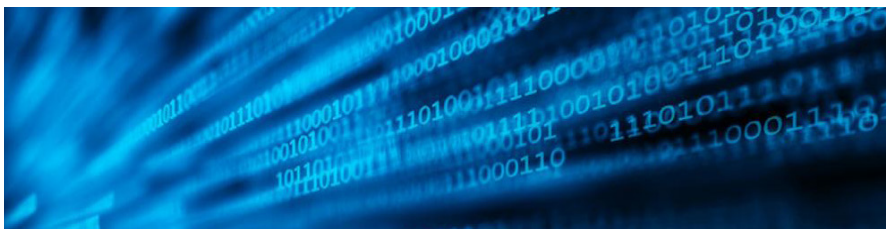
We are innovators, scientists, and discoverers who are helping fundamentally change how the world is powered. Vaisala elevates wind and solar customers around the globe so they can meet the greatest energy challenges of our time.

Our weather and environmental monitoring solutions for renewable energy are guided by several key priorities:

- Thoughtful evolution in a time of change
- Making renewable energy smarter at every stage
- Extending our legacy of leadership

Vaisala is the only company to offer 360-degree renewable energy solutions — from sensors and systems to digital services and actionable intelligence — nearly anywhere on the planet (and even on Mars). Every Vaisala solution benefits from our 85+ years of experience, pioneering deployments in 170+ countries, and unrivaled thought leadership.

Our innovation story, like the renewable energy story, continues.



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