

## AWS810 for solar energy performance monitoring

Providing simplified compliance, improved solar operations, and smart data management



Vaisala's Automatic Weather Station AWS810 for solar energy performance monitoring is a generational leap for solar irradiance and weather sensing. It enables first-class surface weather observations through a modern, secure, integrated network architecture, and it comes pre-configured for solar energy projects, aligning users with today's best practices and reducing costs.

Built on trusted Vaisala sensing technology, AWS810 gives solar developers and operators comprehensive weather measurement, outstanding performance for the life of the solar plant, and modern, open-source data management. It is fully compliant with IEC-61724-1:2021 and simplifies compliance during operational monitoring and other crucial phases.

### Key benefits

#### Optimized solar performance

By accurately measuring the most important solar irradiance and weather parameters, AWS810 helps monitor theoretical power output and detect deviations before they become more serious problems. It is excellent for reducing performance uncertainty, particularly in large-scale solar installations.

#### Next-generation data management

AWS810 is unique in the industry because it uses the open-design Vaisala Data Management Unit DMU801, allowing unprecedented flexibility, data integrity, and future readiness. DMU801 controls sensor data quality before it is sent forward, introduces helpful automations, and enables AWS810 units to be integrated into virtually any current and future communication framework.

#### Simplified operations and reporting processes

AWS810 is fast and simple to install by non-expert technicians, and its ruggedness makes it ideal for today's demanding industrial applications. It comes pre-configured for solar applications and can begin transmitting data almost immediately. It is compliant with IEC-61724-1:2021 and enables users to complete reporting and assessments quickly, decisively, and reliably.

#### The ease of the leading technology

More than 10,000 Vaisala automatic weather station units have been sold for a wide array of industries and applications, and Vaisala's global service network is unmatched. Vaisala is the trusted choice among global solar professionals, and AWS810 puts users a significant step ahead for the life of the solar plant.

## AWS810 at a glance

### Applications

- Assist with operational output monitoring, accurately assessing solar radiation and weather parameters to manage over- or under-production and ensure reliable, long-term system health and performance.
- Demanding resource assessment campaigns for large or complex sites with higher degrees of production variability or uncertainty.



### Key features

**Advanced data management** with Vaisala DMU801, providing unrivaled scalability, security, and automated data quality control

**Seamless integration and flexibility** including compatibility with Vaisala sensing and data services solutions, or third-party equipment

**Secure communication protocols** for Vaisala APIs and customer data collection interfaces

**Modern security architecture** including secure boot and security-hardened hardware components

**High efficiency** courtesy of advanced remote diagnostics and control, remote software and configuration downloads, and long calibration intervals

**Supports enhanced network management** through sensor metadata, remote updates, and remote configuration management (with Vaisala Network Manager NM10)



## 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 renewable energy solutions 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. 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.**

# VAISALA

[vaisala.com/solar](https://vaisala.com/solar)



Scan the code for more information

Ref. B212600EN-A ©Vaisala 2022

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.