

VAISALA

The Vaisala AUTOSONDE® AS41:

Taking accuracy, reliability, and operational efficiency
to new heights

[Solutions Brochure](#)



How weather data benefits society

The four most important factors in weather prediction are:



In today's changing climate, better weather prediction has far-reaching socioeconomic consequences. High-quality atmospheric observations provide the data necessary for accurate forecasting that helps us anticipate and prepare for extreme weather events.

Meteorological institutes need to optimize their observation systems and networks to provide the greatest benefit, and soundings form the backbone of weather observation systems.

An automatic sounding station is an important tool in the drive for meteorological data availability. With the Vaisala AUTOSONDE® AS41 and Vaisala RS41 Radiosonde, national weather services can extend the coverage of their upper-air networks to geographically remote and hard-to-reach places for a comprehensive synoptic upper-air program.

Automatic reliability in every condition

The AUTOSONDE AS41 and RS41 radiosondes work seamlessly and reliably:

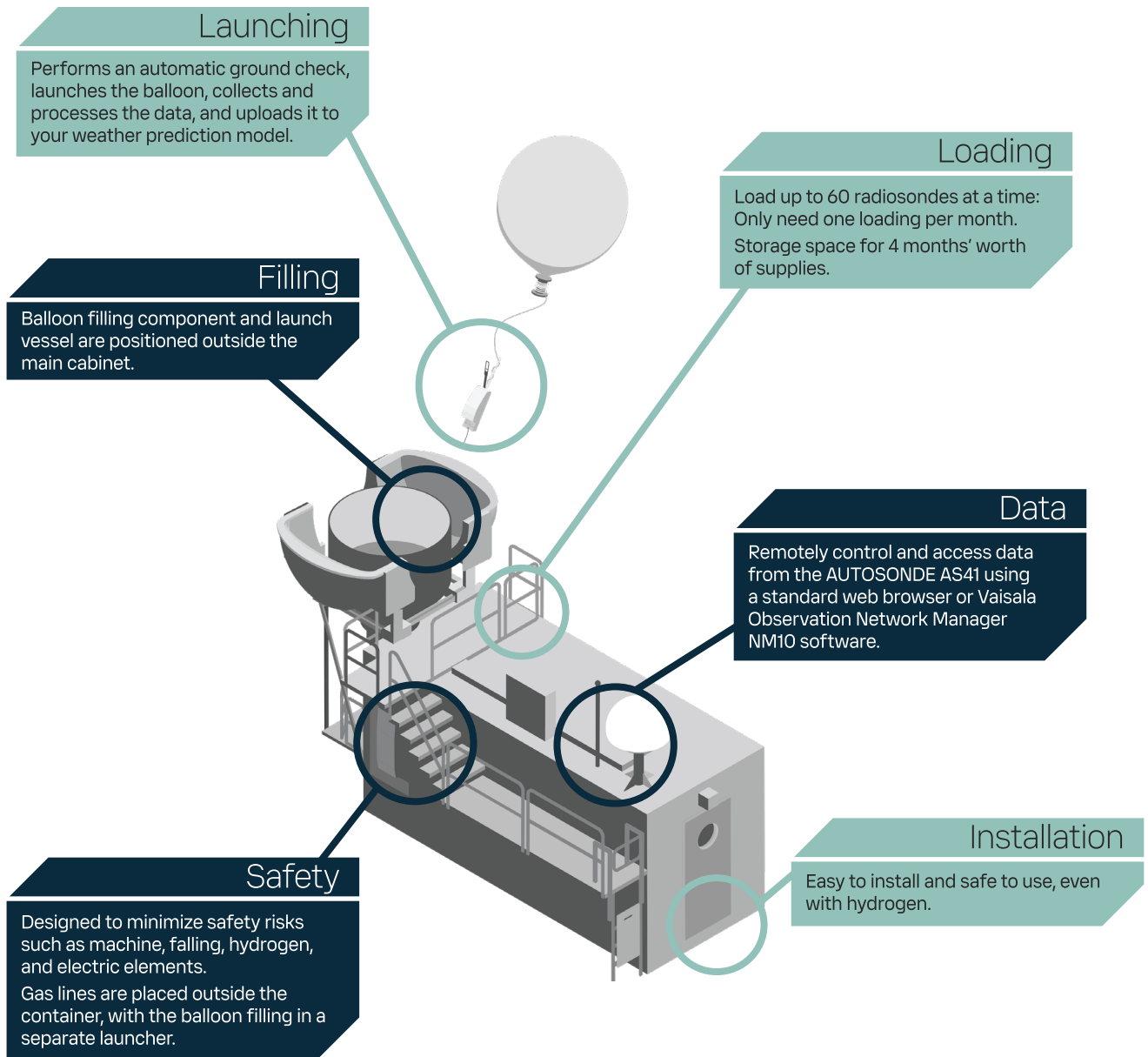
- In the harshest of conditions
- In the remotest of locations
- At the highest level of operational efficiency

Thanks to the fully automated sounding operations of the AUTOSONDE AS41, there is no need for in-person data collection.

It also saves money and time: more than 1,800 staff hours each year compared to a manually operated sounding station. The Radiosonde RS41 features industry-leading data accuracy, with humidity and temperature sensors that ensure dependability.

Carefully tested in the harshest conditions

Vaisala AUTOSONDE stations have been successfully tested with over 1,000 test soundings in the toughest conditions in the world to work at the highest level of continuous operational efficiency and reliability with zero downtime. The test sites include Vestkapp in Norway and Porkkala in the Gulf of Finland.



Vaisala AUTOSONDE stations have been proven in a wide range of climates through years of intensive study and testing. They are an integral part of many national upper-air networks.

- 900,000 automated soundings launched since 1994
- Over 100 AUTOSONDEs are currently in operation worldwide
- 9 out of every 10 automatic soundings in the world are from Vaisala.

Renewal of your AUTOSONDE network is a smart investment. It is advisable to compare the total cost of ownership and optimize costs of installation, maintenance and operations. Many Vaisala customers have found that automating reduces the total cost of ownership.

Why automate sounding operations?

- Rising labor and facility costs
- Challenges scaling infrastructure with demand
- Remote geographical locations
- Accessibility problems in harsh weather.

Comprehensive services to support your operations

Vaisala is your lifecycle partner for environmental observations from the start of investment planning through the equipment end of life.

Every customer is different – so is our approach. We provide many services individually through predefined service activities or modular service agreements.

Expertise you can count on

Vaisala is the world leader in providing the most accurate and reliable weather measurement systems. Our sounding systems are based on more than 80 years of measurement expertise.

Thanks to our history and experience, Vaisala has a sound reputation of being accurate and reliable. Meteorological organizations, defense forces and specialty users rely on Vaisala equipment, and we do our absolute best to provide them with the best possible tools.

We help manage ambitious programs

Our project services include project management, installation, training, acceptance testing, engineering and consulting.

All-around operation support

We build a service level that perfectly meets your requirements. With our tailor-made maintenance contracts, you can maximize the lifetime value of your equipment.

We perform and keep track of scheduled maintenance, send spare parts, take care of software upgrades and always offer priority care to ensure that the highest-quality data is available when you need it. Our technical support is available around the clock 365 days a year to assure a rapid response time to your requests.

With approximately 250 employed service professionals in various locations around the world, our staff ensures that you can make most out of your equipment with the least possible effort. Our field service staff is dedicated to on-site support from installation to maintenance.

Through high-quality data with competitive costs, Vaisala delivers reliable sounding observations in all ambient conditions.

But we don't do it alone.

Weather observations and forecasting is a collaborative effort that spans across the globe. This effort is guided by the World Meteorological Organization (WMO) in co-operation with the International Telecommunications Union (ITU). It is our honor and duty to collaborate closely with meteorological institutes and research organizations all around the world to be able to better respond to customer needs.

Meeting and raising standards

Vaisala's Radiosonde systems are accurate and durable. They provide excellent observation quality and a high rate of data availability. Should new regulations or guidelines suggest changes to operational practices, Vaisala will ensure that systems are kept up and running. Purchasing a Vaisala product is an investment in reliable future.

As a global leader in the field of radiosonde systems Vaisala pays special attention to meeting standards and complying with associated regulations. The sensors used in Vaisala radiosondes are calibrated against internationally traceable reference standards. In addition, all Vaisala products meet ISO 14001 and ISO 9001 standards. Vaisala's radio soundings expertise makes life more predictable. And that makes the world a better place to live in – for everyone.

Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala provides trusted weather observations for a sustainable future. With over 85 years of experience and customers in 170+ countries, from the North and South Poles to Mars, we help provide the most reliable and accurate weather and climate information for better and safer daily lives.

Our instruments and intelligence are known as the gold standard for precision and reliability. As a sustainability leader we enable meteorology professionals to better understand, forecast and explain climate change. We continue to channel our curiosity into climate action and new ways of enabling a better planet for all.

