What is AIDA IoT

AIDA IoT is a full-featured web-based platform for the real-time management, processing and visualization of monitoring data from all sensor types.

Through its web pages, the data are at any time available to the user in graphical and tabular formats.

Benefits

- Flexibility and customization: project set-ups, hierarchies, reports, dashboards and interactive maps.
- Ease of use and fully automatable system.
- Management of a plurality of devices, static and dynamic, with integration also of data from third parties.
- Dedicated modules for specific applications through ad hoc processing.

- User-configurable multi-factor automatic alert generation, display and management.
- Advanced features for statistical-mathematical, automatic and manual analysis.
- Predictive (Forecasting) capabilities based on Machine Learning for monitoring data.
- Tools using AI for file format recognition and data import.

ARTIFICIAL INTELLIGENCE DATA ANALYSIS

AIDA IoT is a full-featured, web-based platform for the management, processing and visualization of monitoring data from all sensor types.

www.aidaiot.com

AIDA IoT imports data in real time and returns information to support the client in predicting and managing possible geotechnical, structural, and environmental risks.

How AIDA IoT works

AIDA IoT is based on an SQL Server database, the most common query language to create, edit and manage data in a relational database.

01

The data are generated by the instruments and sensors installed on site are recorded by a data acquisition system.
These data are then sent via Cloud to an AIDA server using different data transmission protocols (FTP/API Rest/ MQTT etc)

02

AIDA IoT elaborates and validates the data from an engineering point of view and makes them available to the user in both graphical and tabular formats.

03

The user can access data related to the monitoring of a project via a PC or a tablet.
He can choose how to view the data, configure a customized dashboard, add connected devices, set alarms and create customized periodic reports.

INSTRUMENTS/SENSORS

INTERNET

DATA SERVER

o LORA
MQTT
IPI

AIDA IOT

INTERNET

END USERS
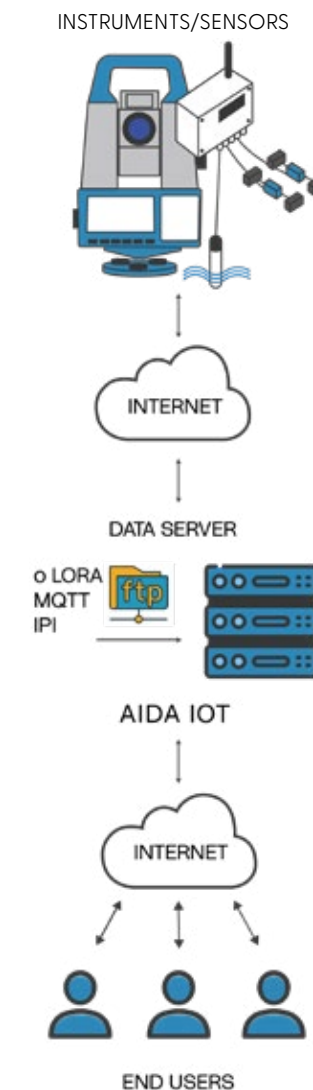
AIDA IoT Menu

Project

The PROJECT section summarizes all the different elements of a monitoring system and provides to users with permissions specific tools to interact with the instruments and the data (data upload and validation, offsets, editing of formulas).

Consulting

In the CONSULTING section, a user has the possibility to consult and manage all the aspects of a project (localization of instruments, interactive maps, charts, customized dashboards and reports).

Modules

This section contains specialized modules that allow a user to access advanced functions such as data processing of specialized instruments and sensors, advanced tools for data analysis and forecasting plus customized functionalities designed ad hoc for the project.

Archives

In the ARCHIVES section the user is able to view, download and upload all collected documents, images and informations in a web space specifically dedicated to a project.

Alarms

This section is dedicated to manage alarms. It allows to monitor the alarms status and, for users with permission, to create, modify and manage all kind of alarms.

Applications

Tunnels
Analysis of convergences and deformations of tunnel sections during construction and operation

Railways & Metro
Monitoring of the displacement and the geometry of the tracks to prevent accidents.

Buildings & Monuments
Monitoring of civil and historical/monumental buildings during and after the construction phase.

Environment
Monitoring of environmental parameters with application in different fields, from agriculture to the generation of energy from renewable sources.

Bridges & Viaducts
Monitoring of the geotechnical parameters and of the structural health of bridges and viaducts using static, dynamic and vibrational measurements.

Dams
Monitoring of embankment and concrete dams during and after the construction phase to ensure their safety and operational efficiency.

Landslides
Monitoring of the stability of slopes and surrounding structures in order to prevent any risk related to hydrogeological instability.

Smart Cities
Monitoring of urban environments: camera control, traffic, pollution levels, environmental and meteorological parameters, waste management and utility networks.

Flexible Hosting Solutions

"@Field Solution"
Data are sent to servers owned by FIELD and each user can access its data via a web browser. Software and hardware maintenance are done by FIELD.

"On Premise Solution"
AIDA and the SQL DB are installed on the user's server. The data will always be available through a web browser. FIELD will take care of the maintenance of AIDA IoT, the Customer is in charge for its own hardware and related software.

20+ Years of experience

150+ Projects around the world

100+ Active Customers

25.000+ Managed Charts

Discover more about AIDA IoT: