



Future-proof solutions
to accelerate
the digitalization
of power grids

Galileo DER
Observability
Platform



gridspertise
accelerating your electric future



Galileo

THE CHALLENGE

Reliability, resilience, and **operational efficiency** are key for decarbonized distribution grids.

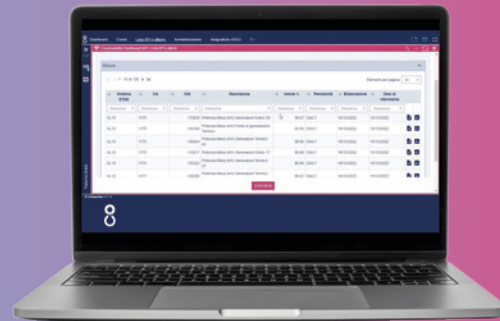
Today **distributed energy resources (DERs)** inject energy into the grid from various locations, meaning that there is a **substantial increase of data generation and energy flows**.

Hence, **Distribution System Operators** need to **monitor, measure and analyze the performance** of the network in a more **predictive manner**, with a high degree of **accuracy and granularity**.

THE SOLUTION

Galileo - Unlocking the Full Potential of DERs.

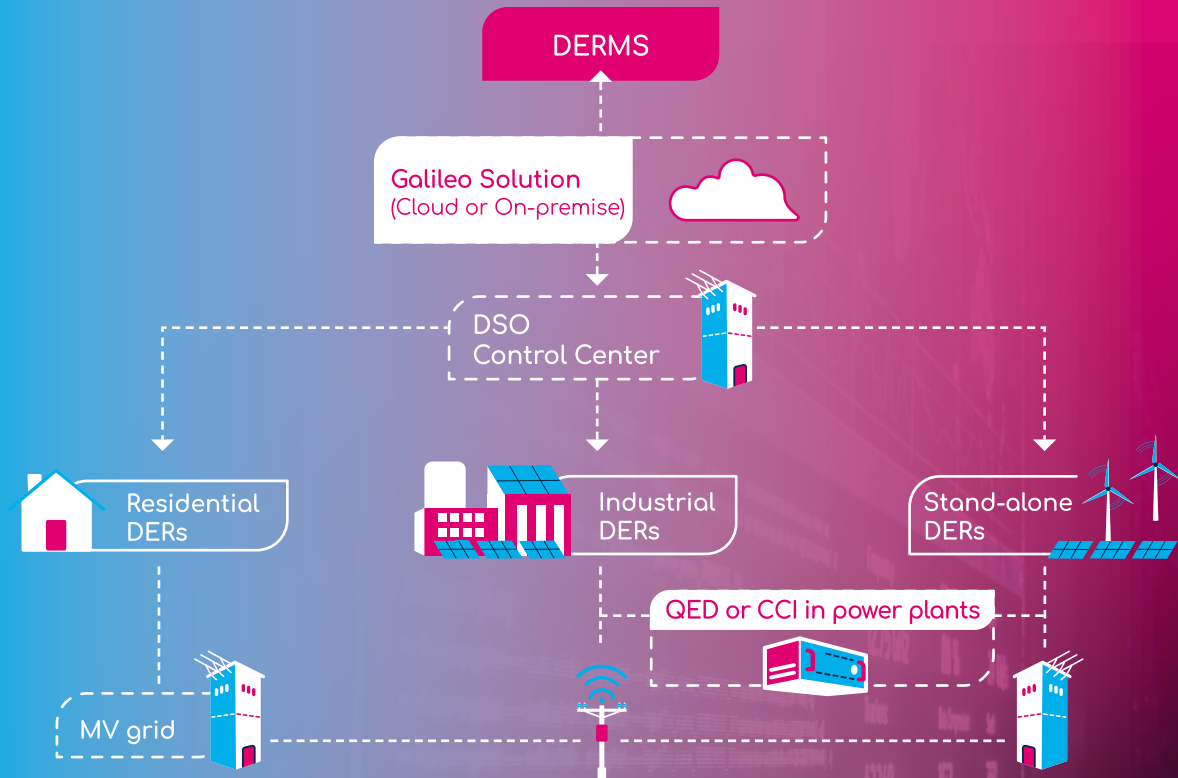
Galileo is a **groundbreaking platform** that enables **observability of DERs** connected to the MV grid and **facilitates the communication** of the related information **to TSO** in **near real time**. It manages the direct **measurements** regarding the power plant performance that are acquired by **centralized plant controller devices**, allowing unmatched observability.



Galileo is designed to collect data from the local power plant controller device. The solution was designed for the Italian CCI, however in other contexts it can be suitable using the QED as monitoring edge device.

With its **scalability, compatibility, and emphasis on grid stability**, Galileo plays a pivotal role in facilitating the seamless integration of renewable energy sources and driving the **towards a more sustainable energy landscape**.

Architecture and Functionalities



RAW DATA EXTRACTION

Search and visualize raw measures transmitted by each edge monitoring device integrated with the Galileo platform.

KPI VISUALIZATION AND MONITORING

Search and visualize historical KPIs (daily, monthly and yearly) availability calculated for the Galileo platform and TSO channels.

CHART VISUALIZATION

Visualization of charts for each DSO Control Center, representing partial availability KPIs (one sample each 10 minutes) calculated for the Galileo platform and TSO channels.

ALARM FLAG FOR SUB-THRESHOLD PERFORMANCE

Each KPI has a flag alarm associated in case the value is below the configured thresholds.

Benefits

Experience the Power of Galileo Today!

Enhanced Observability

Real-time insights into the performance of your DERs. Increased observability allows you to make data-driven decisions and to respond quickly to changes.



Regulatory Compliance

Galileo assists power plant operators in meeting regulatory requirements related to DER monitoring and to reporting. Galileo ensures compliance, reducing regulatory risks and associated penalties.

Maximized Renewable Energy Utilization

Galileo's advanced analytics capabilities enable to optimize the use of distributed energy resources. By analyzing historical trends, Galileo helps forecast future energy generation, enabling informed decisions regarding energy dispatch and load balancing. This results in maximized renewable energy utilization and minimized curtailment.

Join the forefront of the energy revolution with Galileo and unlock the full potential of your distributed energy resources.

Seamlessly integrate, monitor, and optimize your power plant performance while ensuring grid stability and maximizing renewable energy utilization.

Let's accelerate your electric future together.

Contact us today to learn more about Galileo and how it can transform your energy management strategy.

Are you ready
for the electric future?

www.gridspertise.com

