

Meazon LV monitoring service

Increase Your Situation Awareness in LV Networks with Meazon

Meazon can help DSOs increase their situation awareness in Low Voltage (LV) networks and make power grids smarter. At Meazon, we understand the crucial role power grids play in accelerating the energy transition. As partners, we can deploy flexibility and eliminate bottlenecks that hinder the scale-up of Renewable Energy Sources (RES) and Distributed Energy Resources (DERs).



The Challenges Faced by DSOs in the Energy Transition

Distribution System Operators (DSOs) face unique challenges in ensuring their networks' secure, reliable, and cost-effective operation. With the increasing integration of RES, shifting consumption/production patterns, growing demand for flexibility, and the rapid pace of e-mobility, DSOs must manage parameter surges in real time and monitor the aging of lines and substations due to more volatile power flows. This is where Meazon's Low Voltage Monitoring technology comes into play, providing the essential tool for ensuring network resilience, flexibility, and cost-effective operation.

Transforming the Role of DSOs: From Grid Operators to Information Managers

Continuity of supply, minimization of outages, and service quality have become critical performance indicators for DSOs. Concurrently, the demand for large-scale DERs is growing, impacting the DSOs' ability to keep network operations smooth and timely upgrade the network infrastructure. This transforms the traditional role of DSOs into a "sophisticated information management platform" and an "energy supply facilitator."



Meazon's Game-Changing Solution for Real-Time LV Network Visibility

Meazon integrates its game-changing Low Voltage Monitoring technology into urban and rural energy substations, enabling DSOs to improve real-time LV network visibility in a non-intrusive, scalable, and cost-efficient manner. Our state-of-the-art Internet of Things (IoT) data acquisition technologies ensure high-quality and high-quantity information without compromising on efficiency.

Cost-Efficient and Scalable Solution

Our solution includes a cost-efficient powerful electricity analyzer, a compact 30mm wide DinRail device that requires no commissioning. It is always connected to the cloud, eliminating the need for extra communication costs. This device provides real-time information on the electrical characteristics of the line, which is then processed by Meazon's AI cloud service to generate valuable knowledge about the overall performance of the LV grid. The solution is fully scalable, allowing deployment across numerous substations, sites, and geographic regions.



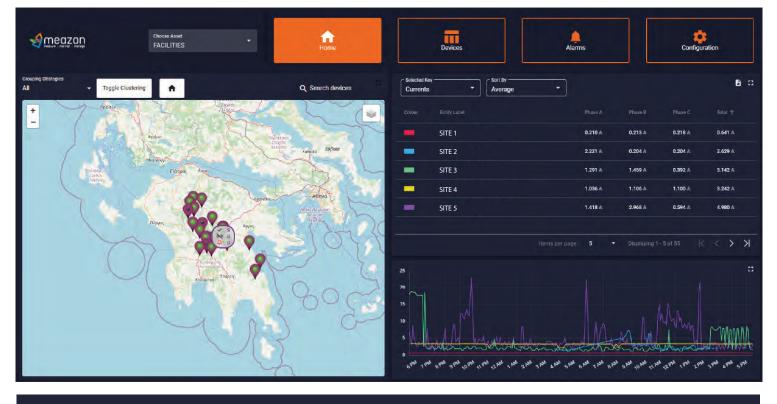


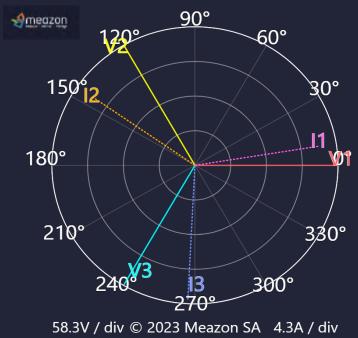
Expanded Monitoring Capabilities

For additional information on substation status, such as temperature, humidity, human presence, water leakages, or CO2 concentration, Meazon offers the option to expand the solution with wireless sensors. These sensors can be easily integrated into a local Zigbee network using the Meazon Janus gateway, providing flexibility to incorporate any Zigbee-compliant sensor. Moreover, our technology allows the integration of industrial sensors with 4-20mA or 0-10V outputs through Meazon's MultiSense device. This enables the construction of a scalable, modular, cost-efficient, and manageable sensor network to support DSO field operations.









<u></u>				
	L1	L2	L3	
Voltage	232.1V	232.2V	231.9V	
Current	15.0A	14.8A	16.5A	
PF	0.971	0.8	0.796	
Active P.	3.4kW	2.9kW	3.1kW	

	V1/V2	V2/V3	V1/V3
Angle	119.8°	120.2°	240.0°
	V1/I1	V2/I2	V3/I3
Angle	9.1°	25.6°	27.0°

Meazon Technology Benefits



Protect Revenue Through Technical and Non-Technical Losses Reduction

One of the most significant benefits of Meazon's Low Voltage Monitoring technology is its ability to protect your revenue. By offering real-time visibility into the electrical characteristics of your network, our solution helps you identify potential issues such as power theft, equipment malfunctions, and inefficiencies. Armed with this information, you can take corrective actions to minimize losses and safeguard your revenue streams.

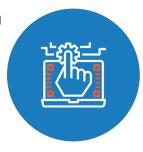


Improve Quality of Service

Delivering exceptional quality of service is paramount in the utility sector. Meazon's Low Voltage Monitoring technology empowers you to offer improved real-time visibility into your network, ensuring a secure, reliable, and cost-effective operation. With the ability to analyze and respond to power quality issues, potential faults, and outages, you can provide an unparalleled customer experience, resulting in enhanced satisfaction and trust.

Optimize Fault Detection Through Timely Supervision

Detecting and addressing faults in your network is vital to maintaining uninterrupted service. Meazon's Low Voltage Monitoring technology enables you to optimize fault detection by providing real-time information on the electrical characteristics of your lines. This allows you to identify potential problems at an earlier stage and take corrective actions proactively. You can ensure optimal network performance by minimizing downtime and reducing the associated costs.





Improve Outage Management and Reduce Downtime Through Early Detection

Outages are disruptive and costly for both customers and DSOs. With Meazon's Low Voltage Monitoring technology, you can significantly improve outage management by detecting potential faults and issues before they escalate into outages. By taking preventive measures, you can reduce downtime and minimize the impact on customers, enhancing their satisfaction while streamlining your operational costs.

Real-Time Grid Monitoring for Anticipating and Optimizing Investment Needs

Meazon's Low Voltage Monitoring technology empowers you with real-time insights into your grid's performance. By analyzing this data, you gain valuable foresight into your investment needs, enabling you to plan for network upgrades, maintenance, and expansion proactively. With this proactive approach, you can optimize your investments and ensure that your network is ready to meet the growing electricity demand.





Efficiently Plan and Execute Network Upgrades

Planning and executing network upgrades is complex, but Meazon's Low Voltage Monitoring technology simplifies the process. With real-time information on your network's performance, you can identify areas that require upgrades or reinforcements. By acting promptly and efficiently, you can maintain a reliable and secure grid that meets the increasing electricity demand

Assess Future Growth Potential for EV and PV Deployment

Electric vehicles (EVs) and photovoltaic (PV) systems are rapidly gaining popularity, necessitating careful assessment of their impact on your network. Meazon's Low Voltage Monitoring technology offers the potential to detect the presence of EVs and PV systems in your Low Voltage network. This critical information allows you to plan for future expansions, upgrades, and reinforcements, ensuring that your network can accommodate the growing demand for electricity from these technologies.



Discover the Benefits Through a Pilot with Meazon's Low Voltage Monitoring Technology

Are you ready to elevate your network's performance, reliability, and efficiency? Consider running a pilot with Meazon's Low Voltage Monitoring technology to experience its transformative capabilities firsthand. Our comprehensive solution includes a powerful electricity analyzer, wireless sensors, and an AI cloud service, transforming your network into a sophisticated information management platform and energy supply facilitator.

Partner with Meazon for a Smarter Grid

By partnering with Meazon, you can transform your DSO operations and increase the pace of the energy transition. Our Low Voltage Monitoring technology enhances your situation awareness, improves network performance, and enables efficient decision-making. Let's work together to build a smarter grid for a sustainable future.



Contact Meazon Today to Learn More

To learn more about Meazon's Low Voltage Monitoring technology and discuss the possibilities of running a pilot, get in touch with us today. Our team of experts is ready to guide you through the process and demonstrate how our cutting-edge solutions can help you ensure the secure, reliable, and cost-effective operation of your network. Together, let's accelerate the energy transition and shape the future of the utility sector.

ABOUT MEAZON

We make the energy data acquisition easy & cost efficient and provide it as a service in an open data format

The transformation of traditional commoditized energy markets to advanced services markets is dependent on capturing data at high reporting intervals and managing loads in real-time.

The need for cyber-physical devices with build-in intelligence, scalability, end2end security, ultra-low bandwidth requirements, and cloud-based real-time management is of paramount importance.

Meazon technology is the only technology that provides a convincing answer to this problem and combines ideally cloud services with embedded device software and device hardware in a uniform end-to-end architecture.

