

Software

Sapient™ | Asset Insights

Navigate the future **with insights**



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Is the network ready for the future?



In the constantly changing energy sector, the transition to net-zero and embracing of sustainable energy sources is reshaping network infrastructures and operational approaches. Networks must handle increased loads for transportation and heat, incorporate a greater variety of distributed generation sources, tackle capacity constraints, provide flexibility services, and maintain reliability, affordability, resilience, and security.

The power grid is experiencing an increase in critical assets and encountering a more unpredictable risk landscape as a result of these transformations. Moreover, the digitization of networks has resulted in a significant growth in data accessible to operators, offering both opportunities and challenges in utilizing this data efficiently to unlock valuable insights.

At Camlin Energy, we are empowering companies to navigate the future complexities of the energy sector, with confidence. Our suite of sensors, software & expert services enable energy operators to optimize the performance of assets, enhance network reliability and deliver a Net Zero Future for their customers.

Why Camlin Energy?

Experts, expertise, experience – this is what differentiates Camlin Energy.

At Camlin Energy we have a dedicated team of asset and network experts, data scientists, and technology specialists who collaborate seamlessly to provide unparalleled results for our customers. With a wealth of knowledge accumulated over 30 years in asset-intensive sectors, we possess a deep understanding of your challenges and business needs. This expertise is leveraged to develop tailored solutions that effectively manage assets and networks, ensuring optimal performance.

We have a history and culture of fostering successful customer collaborations, with a proven track record of delivery. This has solidified our reputation as a reliable partner in the industry.



Let's Talk Sapient - Navigate the Future with Insights

Sapient Asset Insights is part of Camlin Energy's Sapient Solution, a suite of powerful software applications for Asset, Fault and Networks underpinned by the Sapient data management platform.

Sapient provides energy operators with unparalleled visibility of their networks and assets, enabling them to predict performance and make targeted interventions and investments to protect the network, optimize operations and reduce costs, all while driving a safer and more sustainable future. Sapient empowers you with insights to navigate the complex challenges of today, while ensuring you are well positioned for a better future.

The applications have been developed leveraging our deep expertise in the industry and domain encompassing assets, networks, and data management.



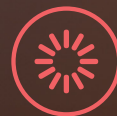
Sapient™ | Asset Insights

A powerful software application developed to maximize investments in monitoring programs. Sapient Asset Insights transforms data into actionable insights that are proven to enhance asset reliability and performance.



Sapient™ | Network Insights

Developed to elevate network performance, Sapient Network Insights, provides users with unparalleled visibility of historic, current and future load patterns across the entire network topology.



Sapient™ | Fault Insights

Sapient Fault Insights provides users with a consolidated view of active faults on the network, along with a detailed case history allowing management of faults in the most efficient and effective way.

The Sapient Value

Ultimately, Sapient empowers businesses to unlock the full value of their asset monitoring program investments and achieve greater levels of operational excellence.



Protect your People

- Reduce unknown and unseen risk
- Knowledge to safely operate the grid
- Minimize time spent on site "touchless substation"



Operational Efficiency

- Enhanced reliability
- Preventative maintenance
- Single source of truth for data & insights



Financial Discipline

- Reduced & stabilized O&M costs
- Optimize capital investments



Customer Satisfaction

- Increased Network reliability
- More efficient customer facing processes (e.g. Connections)



Readiness to Act

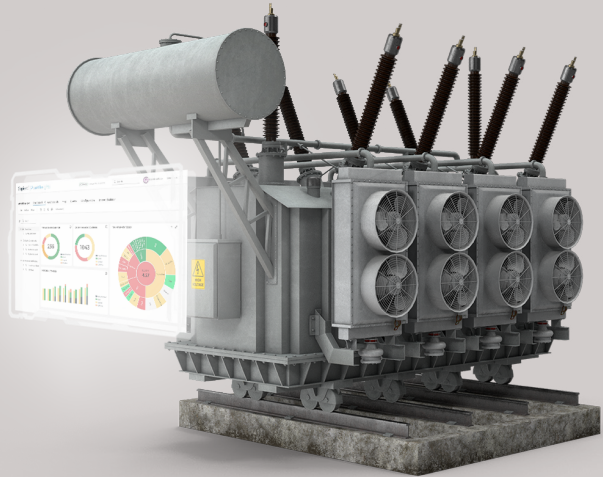
- Insights & data to proactively plan maintenance strategies
- Support for long term scenario planning



Resilience for the future

- Strengthening & Modernizing the grid
- Support for flexibility services

The Challenges Facing Energy Operators



Asset management plays a crucial role in the operations and financial planning of transmission and distribution (T&D) companies.

With a significant portion of their expenses allocated to managing assets, these companies face various challenges as the industry undergoes transformations driven by initiatives like the Road to Net Zero and global clean power goals. These challenges include;

- dealing with aging assets
- ensuring health and safety standards
- navigating budget constraints
- coping with resource and experience limitations
- adapting to multi-directional and rapidly changing power flows
- meeting performance expectations from customers.

Amidst these challenges, the necessity to comprehend and effectively manage assets has become increasingly paramount for T&D companies. By prioritizing asset management, these companies can enhance safety, reliability, and resilience in their power delivery planning and operations. This proactive approach not only aids in meeting regulatory requirements but also ensures that the infrastructure can adapt to the evolving energy landscape and customer demands.

Utilities who leverage advanced analytics and insights as part of their asset management strategies can unlock up to

20%

in operational savings,

while improving network reliability,
optimizing expenditures
and mitigating risks

McKinsey & Company - "A new approach to advanced analytics in utility asset management"

What is Sapiient Asset Insights?

The Future is Clear with Insights

Sapiient Asset Insights, is an advanced software application built and supported by Camlin's team of asset experts. Designed to maximize investments in monitoring programs, Sapiient Asset Insights guides users through the entire asset assessment journey, providing actionable insights and prescriptive actions.

Actionable Insights and Prescriptive Actions

By integrating various data sources and leveraging sophisticated engineering analysis techniques along with AI/ML analytics, our software has the capability to convert raw data into valuable insights and predict the performance of assets.

These insights are not only actionable but are also seamlessly integrated across an organization, enhancing utility companies' planning and asset management workflows. With Sapiient Asset Insights, users can make informed decisions based on real-time data, leading to optimized asset performance and increased operational efficiency.

See Beyond the Surface...

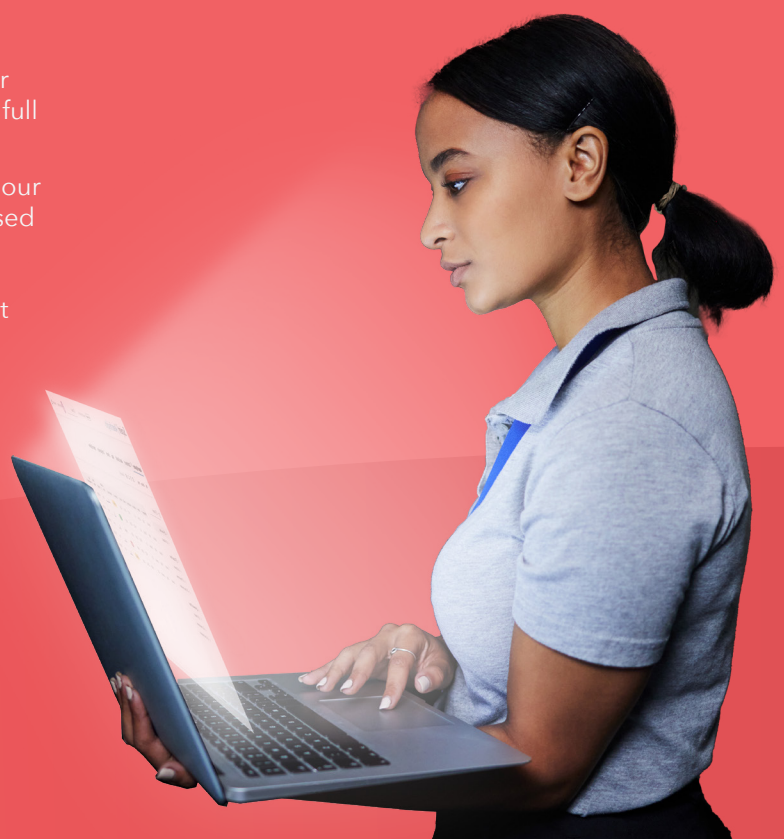
We go beyond simply providing visibility into asset health. With Sapiient Asset Insights users can uncover deeper insights and navigate a comprehensive, and full analysis journey with ease.

By leveraging the experience of the Camlin experts, our actionable insights and prescriptive analytics are based on 40+ well-defined failure modes.

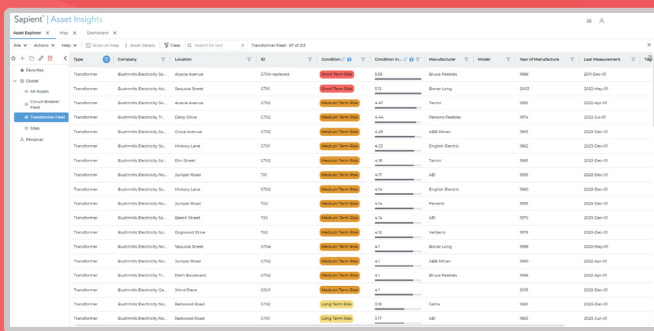
We empower operators to make informed decisions and take the right actions, leading to optimized asset performance and increased operational efficiency.

Enterprise Grade Architecture

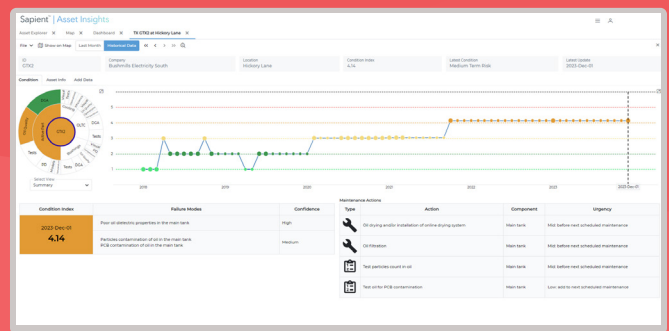
At Camlin Energy we pride ourselves on offering a versatile, enterprise-grade architecture that has been proven to scale effectively. Our solution seamlessly integrates with existing asset management and data analytics systems within your organization, reducing IT costs and minimizing risks associated with implementation.



Application Features



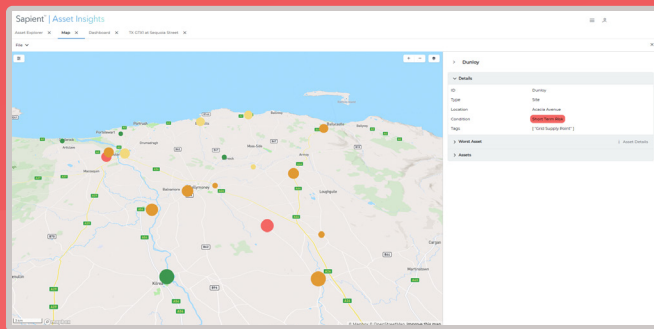
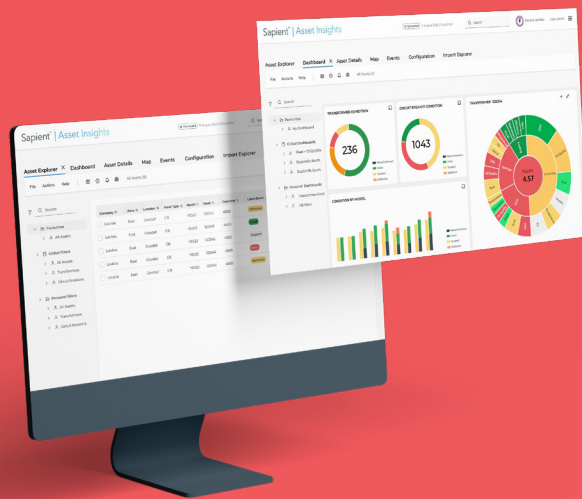
Data Aggregation



Predictive Analytics

Work Management

Prescriptive Actions

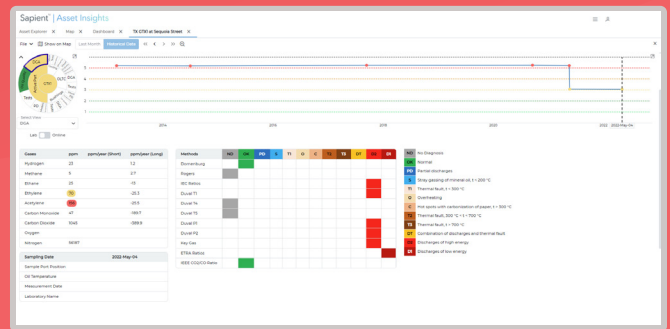


Decision Support

A decision support framework enhances asset management by visualizing assets and key performance indicators (KPIs) through dashboards and reports. These visual representations cater to different application needs and facilitate decision-making processes.

Impact of Failure

Additionally, users can configure asset criticality and assess the impact and costs of failure by combining probability of failure with asset classes. This user-defined approach allows organizations to proactively address potential risks and optimize asset management strategies.



Asset health

We combine our deep domain knowledge and engineering expertise to create asset-specific models that can accurately assess the health of assets. By utilizing sophisticated algorithms and data analysis techniques, these models can calculate and establish health score indexes that provide valuable insights into the condition of assets. This information enables organizations to make informed decisions, optimizing operational efficiency and minimizing downtime.

The Value of Sapient Asset Insights

Sapient Asset Insights enables operators to shift from reactive to proactive maintenance strategies minimizing the risk of catastrophic failures while improving overall operational efficiency. Additionally, by leveraging the power of data and analytics, organizations can make more informed decisions, ensuring resources are allocated effectively.



Optimized capital expenditure

Extending asset lifespan is vital for capital optimization, Sapient Asset Insights enables utilities to manage current risks (spend less) or spend the same amount and achieve higher reliability through replacing the riskiest assets.



Optimized O&M budgets

Operating expenses are reduced by optimizing preventive-maintenance activities leveraging condition-based maintenance practices.



Improved data management

Enhanced operational efficiency with a consolidated view of asset data from multiple sources, eliminating data inaccuracies and loss of knowledge.



Reduced risk of catastrophic failure

To reduce catastrophic failure risk, Sapient Asset Insights assesses failure risks, enabling asset managers to prioritize replacing critical assets to increase system reliability, measured by SAIDI and SAIFI metrics.



Actionable insights for faster decision making

Predictive analytics provide actionable insights and recommendations to enhance accuracy and drive quicker decision-making.



BY INTEGRATING VARIOUS DATA SOURCES AND LEVERAGING SOPHISTICATED ENGINEERING ANALYSIS TECHNIQUES ALONG WITH AI/ML ANALYTICS, OUR SOFTWARE HAS THE CAPABILITY TO CONVERT RAW DATA INTO VALUABLE INSIGHTS AND PREDICT THE PERFORMANCE OF ASSETS.



Platform Spotlight

The Sapien Platform is the core data management platform shared by all our Insights applications. The platform provides a common framework for the ingestion and processing of data; data management; and the execution of advanced AI/ML models.



Sapien™ | Asset Insights



Sapien™ | Network Insights



Sapien™ | Fault Insights



Sapien Platform

Data Integration
& Sharing

Data
Management

Data
Processing

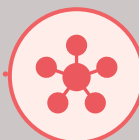
Data
Contextualization



Sensors



Historian



SCADA



Asset
Management



Field



ADMS



Grid / DER

Platform Features



Data Contextualization

An IEC CIM compliant network data model that allows data to be placed and processed in the wider network context including Network Topology (as designed and as operated); Network Measurements; Network Operations and Asset Registry



Data Integration & Sharing

Streaming and batch data ingestion from sensors & equipment deployed on the network as well as integration to internal IT systems



Data Management

Enterprise data management including data catalogue, data quality monitoring, data governance and controls



Data Processing

Capabilities for Workflow and Event Management; ML Lifecycle and Pipeline Orchestration

Key Benefits



Cyber Secure

Equipped with strong authentication, encryption, and authorization controls to protect sensitive data, confidentiality and mitigate risks. Aligned to ISO/IEC 27001 for enhanced security and fosters a secure digital environment for all stakeholders.



Operates alongside existing IT platforms

Connects to customer systems with an open API and can receive, process and provide data back to third-party systems already used by customers, protecting and building on existing investments.



Is Open

Open standards in data management ensure accessibility, with a comprehensive data catalogue to enhance operational efficiency and decision-making. Our robust data governance frameworks maintain data integrity, security, and compliance.



Customer Centric, Vendor Agnostic

The platform can harness online and offline data from any vendor's asset monitors, internal data stores or third party data.

Camlin Energy

Protecting Critical Infrastructures

At Camlin Energy we work with global energy companies to provide unparalleled visibility of networks and assets enabling utilities to transform their performance through optimized operations.

Drawing on our 30+ years leadership in asset performance and data analytics we help utilities harness data driven insights to make informed decisions that drive significant business value.

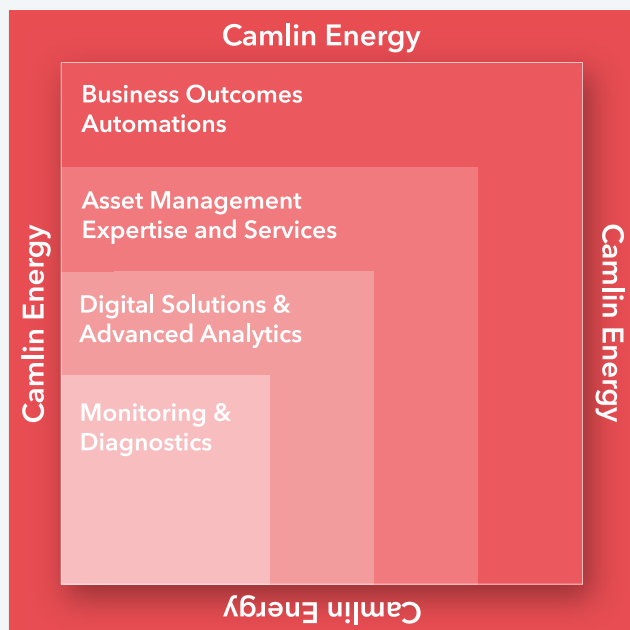
Our suite of asset monitoring technology combined with advanced software and services optimizes the performance of critical assets, protecting the network, improving safety and reliability, while enhancing operational and financial performance.



Industry leading monitoring technology combined with edge of grid diagnostic capabilities



Digital solutions designed to optimize asset performance with advanced actionable insights



Technical services offering a comprehensive asset assessment and decision-support framework



End-to-End solutions across Generation, Transmission & Distribution focused on enabling optimal benefits realization

What makes us
different?

We know assets.

We know data.

We are the experts.



Camlin Energy stands out from other companies due to the depth of our industry experience and asset expertise. Our asset monitoring solutions are designed to translate, automate, and apply real-life experiences that have been accumulated over decades of work in the field.

With a proven track record of project delivery, Camlin Energy takes a proactive stance in understanding and meeting the evolving needs of our customers, ensuring their success in achieving their objectives.

But everyone says that.

Let's look at some of the outcomes and transformational change delivered for our customers...

We have REVOLUTIONIZED the UK distribution network through our combination of sensors, software & services, driving a step change in reliability for energy consumers.



Since 2015 our solutions and services have saved:

1,155,789

consumers from experiencing power cuts by restoring power in less than 3 minutes

84,000+

customers avoided long unplanned power outages

444,240

power cuts have never occurred as the fault was proactively repaired

184,170

hours of power cuts for customers have also been saved from shorter duration power cuts

140,000,000

customer minutes lost saved in the UK since 2015



