

Tools to keep your LV network operating efficiently

VisNet[®] Business Brochure



The visibility to anticipate tomorrow's grid today.

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www.visnet.tech

Pioneering technology for LV networks

VisNet[®] from EA Technology is leading the charge with transformative technology and powerful insights to propel the evolution of our energy infrastructure.

Exclusively focused on developing Low Voltage network management solutions that support the world's transition to decarbonisation, we are proud to offer some of the most advanced and reliable LV grid modelling and monitoring tools available.

Our experts are constantly innovating to ensure that VisNet tools not only meet your evolving needs, but also offer the flexibility to handle any challenges that you may face in the future.

Whatever tomorrow's grid may bring, we can help you prepare today.





Introducing VisNet[®] Modelling

We develop software tools to accelerate network assessments and connections, smoothing the road to net zero. Our VisNet® Connect and VisNet® ConnectLite products improve workflows and provide customers with instant connection estimates and quotes. Our VisNet® Design tool simplifies design and modelling of new and existing LV networks.

Our VisNet[®] Modelling tools serve over 24.7 million homes and businesses across 445,000 substations.



VisNet® Connect

Comprehensive connections workflow optimisation and self-service tool.

VisNet[®] Connect gives network operators and utilities the confidence to allow customers to self-serve acceptable quotes to customers, with optional checks if required. It has internal tools for staff to check and edit quotes and generate construction plans following a streamlined workflow that integrates with your systems.

Benefits:

- Network capacity assessment.
- Red / amber / green (RAG) network capacity visibility for customers and staff.
- Map canvas background.
- Automatic cable routing and manual connection drawing tools.
- User-friendly edit and quotation plan tools for internal users to access and modify customer drawn designs.
- Post-connection network studies considering multiple parameters (thermal, voltage, impedance, etc).
- Bill of materials (BoM) generation.
- Customer Relationship Management (CRM) system integration.
- Step by step customer guidance.
- Customer connection type interview (optional).



VisNet® ConnectLite

A personalised connection estimation tool.

VisNet® ConnectLite has been successfully operating for over four years and is a perfect first step into customer connection self-service. It considers your unique requirements, location, and available network capacity to provide a tailored price estimate for your connection.

VisNet[®] ConnectLite includes standard benefits for LV connection design such as:

- Connection cost budget estimator.
- Network capacity assessment.
- Red / amber / green (RAG) network capacity visibility.
- Map canvas background.
- Manual connection drawing tools.
- Bill of materials (BoM) generation.
- Step by step customer guidance.
- Customer connection type interview (optional).





VisNet® **Design**

Designing low voltage networks for a better future.

VisNet[®] Design is used by over 550 planners across 19 companies for Low Voltage (LV) network planning, design and assessment studies.

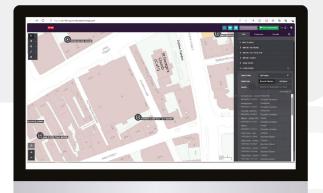
VisNet® Design streamlines LV network design by presenting industry-standard calculations through an intuitive user-friendly interface. It enables the rapid creation and assessment of network designs, reducing the time taken from connection request to fully compliant and costed design. In response to the growing impact of low carbon technologies, the tool aids network designers in promptly evaluating existing networks and new connections, ensuring safe and cost-effective adaptations.

VisNet[®] Design is an essential tool for electrical network operators, connection providers, contractors, and design consultants.

Launched in 2022 it builds on decades of experience, replacing the UK industry standard WinDEBUT tool after over 30 years of service.

Benefits:

- Easy to use web application with minimal training requirements.
- Centralised file management to access saved models.
- Network schematic and assessment results shown overlaid on a map view.
- Combine any mix of customers including generation at a or distributed along a cable.
- Easily model existing DNO network as single line and load.
- Enterprise version available with GIS data integration.
- Rapid assessment of complex networks.
- Cost effective with clear, simple pricing model.
- Easy deployment with automatic updates.
- Upload site plans to use a study background.







VisNet[®] Monitoring, anticipating tomorrow's grid

Consumer and Business demand for electricity is growing exponentially during the 21st century,

massively increasing the need for reliable electricity supplies. With our innovative solutions we promote sustainability, supporting the global aim to achieve NetZero within 25 years.

Despite there being over 28 million LV substations worldwide, less than 1% of these are intelligent. VisNet® real-time grid monitoring digitises LV networks, increasing visibility for network operators promoting the development of resilient, accessible, low-cost energy networks.

The VisNet[®] Hub, ALVIN Reclose², VisNet[®] Detect Pro, VisNet[®] App Families and Substation360 are the tools you need to monitor your Low Voltage systems, detect faults before they happen, and reduce your downtime.

Monitoring Solutions

VisNet® Hub

Works to open your network.

Our innovative real-time LV monitoring system offers unrivalled network transparency to facilitate proactive network and fault management strategies. Transforming data into powerful actionable insights with smart software solution compatibility and enabling reactivity to faults with location precision and proactively informing future planning requirements.

The VisNet® Hub is:

- An LV Monitoring device with advanced on-device functionalities.
- Installed in MV/LV substations and monitors up to 6 LV feeders.
- Able to run multiple algorithms (Apps) on-device to provide valuable data insights.
- Secured and Encrypted LV-CAP OS environment with OTA software updates.
- A low cost RTU with multiple plug-in options for additional devices and sensors.



VisNet® Guard

Detects faults before they happen.

An advanced LV monitor that uses a minimal number of sensors to detect faults early and supports a proactive approach to network and fault management, allowing you to pinpoint the exact feeder way and phase(s) that are the source of the activity. Take the steps necessary to prevent failures before they can happen, minimise downtime and save you money.

The VisNet® Guard Features:

- Real Time monitoring.
- Monitors & measures up to 8 LV Currents.
- Self Powered.
- Suitable for live installation.
- 4G Communication.
- User Interface via Web Application.



Restoration Solutions

ALVIN[®] Reclose²

Smarter fault management and reliable power restoration.

By restoring power to Low Voltage networks, ALVIN Reclose² solves the problem of intermittent faults caused by unreliable supply in multiple fuse operations. Decrease cost and inefficiency from substation visits with ALVIN Reclose² and resolve faults on the first attempt.

ALVIN Reclose² Features:

- Replacement for a LV network fuse.
- Automatic multi-shot trip and close capabilities to manage transient faults and overloads.
- Back up fuse protected.
- Restores supplies after a transient fault with no need for manual intervention.



Software Solutions

VisNet® Detect Pro

Turn data into actionable insights.

Comprehensive data is crucial to the efficient operation of a network. VisNet® Detect Pro empowers complete control over your network, presenting data in a way that is easy to understand, meaningful and actionable. The user interface provides effective visualisation of network issues, presenting data and details for you to analyse a successful response.



VisNet[®] Apps

VisNet[®] App Families

Manage and enhance your networks with real-time data.

Using configurable on-device algorithms to filter and process relevant data directly from your network, the VisNet App Families provide actionable insights into the health of your network. These insights are visualised through our intuitive Detect Pro user interface, offering a clear view of performance.

- **Reliability Apps** real-time alerts for loss of supply and/or pre-fault activity, including insights into the type of fault and its location.
- **Capacity Apps** real-time and historic loading data to manage capacity.
- Local Integration Apps view data from a range of plug-in options available with the VisNet Hub.
- Quality of Supply Apps analyse data from LV monitoring to provide insights related to power quality issues.



Substation360

Centralised Ecosystem Substation360

Centralised data management for your network.

With the increasing complexity of advanced hardware and monitoring solutions, managing data flow, hardware integration, and system communication has become more challenging. Substation360 provides a centralised platform designed to streamline these processes, making it easier to harness and manage the full potential of your LV network.

To book your demonstration or to get further information and advice please contact us on +44 (0) 151 347 2313 or email **sales@eatechnology.com / www.visnet.tech**



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