



# Prioritise your investment in an ageing network

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## VisNet™ Hub

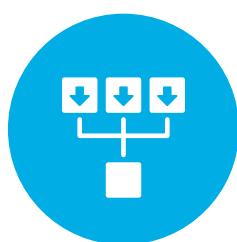
Providing valuable insight  
into the efficiency & optimisation  
of LV networks

[www.eatechnology.com](http://www.eatechnology.com)

# VisNet™ Hub

**VisNet™ Hub** is a real-time monitoring device that operates in low voltage distribution substations providing valuable insight into the efficiency and optimisation of LV networks.

It has been designed to:



Push intelligence to the network edge



Increased visibility



Improve analysis capability

## An LV Network Revolution

LV Networks are at the forefront of the accelerating move to widespread low carbon technology adoption.

Electric vehicles which use a similar amount of electricity as an average home are increasingly becoming mainstream. These and other low carbon technologies have the potential to significantly change the traditional daily energy usage assumptions today's LV networks were designed around.

The results of the My Electric Avenue modelling\* showed that across Britain 32% of low voltage (LV) feeders (312,000 circuits) will require intervention when 40% – 70% of customers have EVs, based on 3.5 kW (16 amp) charging. Adoption of domestic 7kW charging only exacerbates this impact.

All likely futures point to an LV network having to cope with widespread electric vehicle, heat pump, photovoltaic and local storage penetration.

## Opening Up Networks

The **VisNet™ Hub** is a radical approach to LV network visibility, inviting innovation and paving the way for active network management through an open measurement and insight architecture.

There are countless specifications and strategies being explored and adopted by the UK DNOs based on the outcomes of trials and tests of LV network monitoring. The risk of getting these choices wrong in a rapidly changing world with an uncertain future is high.

The **VisNet™ Hub** de-risks these emerging strategies by implementing widespread monitoring on a standard and open software platform which can flex to accommodate new ideas without incurring the burden of having to install new equipment. Networks need a robust and future proof data infrastructure which can adapt to a rapid reshaping of the energy sector – LV-CAP provides this.

The openness of the solution lets network operators deploy solutions from best-of-breed providers (including themselves) to deliver cost effective gains in performance, planning, load management and network charging.

\* <http://myelectricavenue.info/>

# What is VisNet™ Hub?

VisNet™ Hub is a monitor that operates in distribution substations. It checks voltage and current data on every LV feeder giving insight about load, faults and condition information across the network. This data is critical to network operators having the ability to improve both network flexibility and efficiency together with security and quality of supply as low carbon technologies become more widespread.

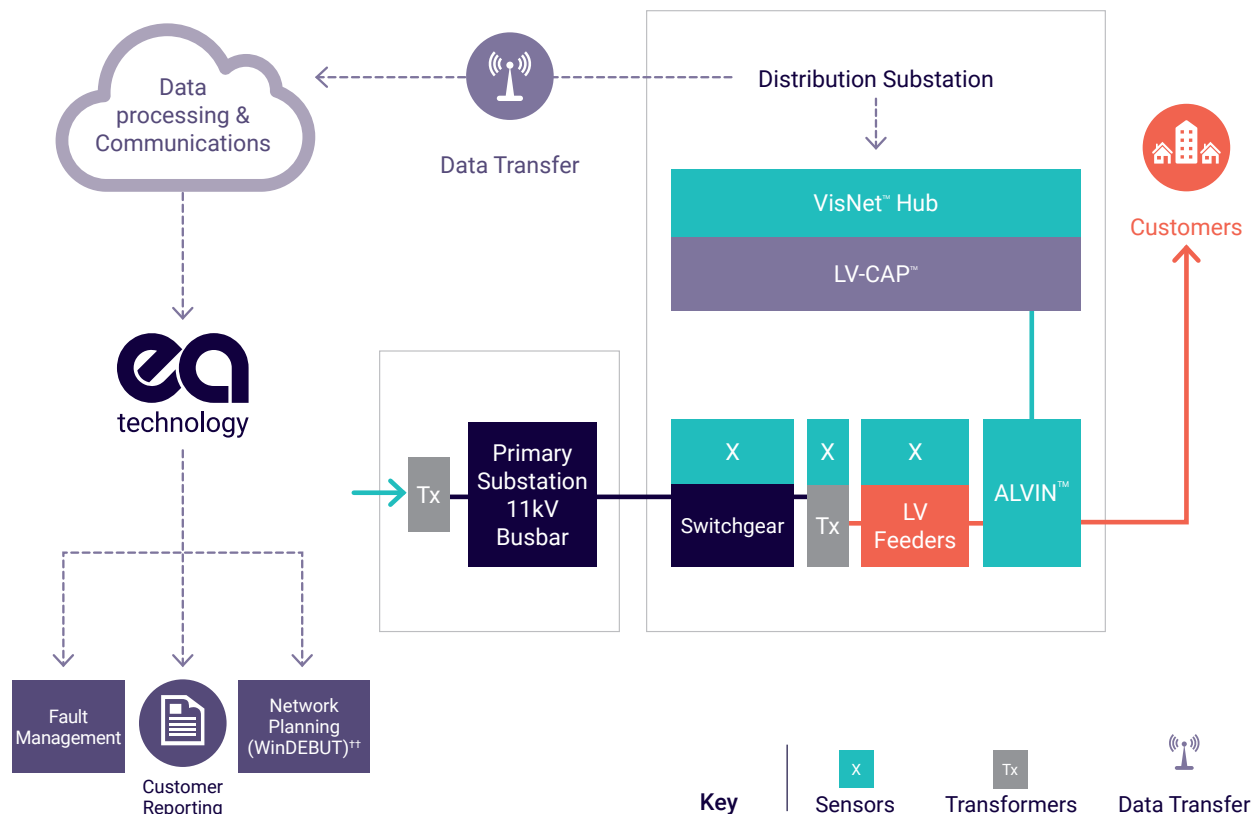
VisNet™ Hub is designed to operate with as much local processing and interpretation power as possible, undertaking automated data analysis that trigger text and email notifications as network issues arise.

VisNet™ Hub provides the insight to actively manage and plan LV networks of the future and simplifies the deployment of solutions and control capability.

VisNet™ Hub runs an open application platform called LV-CAP™. LV-CAP™ has been specifically developed to be deployed to distribution substations, mining data locally across thousands of sites and consolidating it centrally. Using a tailored suite of locally developed software apps, LV-CAP™ allows network operators to distribute intelligence across the network allowing credible decisions to be made to optimise performance for all customers.

This rounded solution gives DNOs the opportunity to have full visibility and control of their LV network, at the lowest possible cost.

VisNet™ Hub allows agile network wide analysis and response as well as reduced data transmission



† <https://openlv.net/> †† WinDEBUT can be purchased separately

## VisNet™ Hub Capability

- VisNet™ Hub provides comprehensive network visibility with its capability to monitor 6 feeders and communicate via GPRS (2G/3G/4G).
- Capacity to report on predetermined timescales of every minute, 3 minutes, 10 minutes, 30 minutes, hourly or daily.
- Communications defined by Applications, DNP3, HTTPS & IEC61850
- Compact and neat design (Size 430 x 266 x 71mm (h x w x d))
- Enclosure protected to IK08, IP 55
- Can be upgraded to support emerging standards i.e. IoT-NB, LTE Category M and 5G

## VisNet™ Hub Compatibility

- The VisNet™ Hub also integrates with the ALVIN™ range of equipment to provide LV network control and automation capability
- The VisNet™ Hub can also take inputs from other sensors to monitor the substation environment, presence detection and equipment condition
- Information from the VisNet™ Hub can be used with WinDEBUT™ to improve network modelling certainty

To book your demonstration or to get further information and advice please contact us on +44 (0) 0151 347 2313 or email [sales@eatechnology.com](mailto:sales@eatechnology.com)

### LV Cloud Portal and the EA Technology Customer Service Centre

Instrumental in the deployment of VisNet™ Hub is the LV Cloud portal for the management and tracking of all devices. The LV Cloud portal will enable users to visualise and manage the entire fleet of devices quickly and easily.

EA Technology also boast a customer service centre which facilitates both customer service and field service utilising the Dynamics 365 suite.

Both the LV Cloud portal and the EA Technology customer service centre are available from any web browser.

The LV Cloud portal provides critical network visibility and includes:

- Real time view of asset performance
- Historical view of asset performance
- Events and Alarms log
- Location of the equipment
- Details of the VisNet™ Hub unit installed

The EA Technology Customer Service Centre provides:

- Clear points of contact to register new equipment, request assistance and/or troubleshooting via:
  - an internal or external telephone number;
  - a web-based interface;
  - an e-mail address;
- All users have easy access via a dedicated web portal
- Access to details concerning the type and location of installed equipment