



# Astute® HV Monitoring

## Proactive partial discharge detection and consultancy



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### Astute® HV Monitoring

Our 24/7 monitoring for partial discharge predicts 85% of failures in high voltage networks, allowing you to intervene at a time of your choosing to minimise network disruption and failure risk.

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

# Our award-winning **Astute® HV Monitoring** service protects your network from 85% of failures, delivering financial and performance benefits

## Benefits of Astute® HV Monitoring

Partial discharge (PD) often goes undetected because performance of the high voltage system is unaffected until a catastrophic failure occurs. However, even small traces of partial discharge give off signs that can be detected by specialist equipment and 24/7 monitoring. That's exactly what **Astute® HV Monitoring** does.

The system monitors cables and switchgear for symptoms of PD, and automatically reports results to **EA Technology's** laboratory. Should we detect abnormalities, we can then offer advice and how to react, based on our assessment of the severity. Because PD usually deteriorates gradually, in most cases inspection and replacement can take place during planned maintenance periods.

The potential cost savings are immense, compared with the costs of asset failure in a typical HV system, be that public or private. As well as replacing damaged switchgear and cables, there can be regulatory fines, collateral damage and harm to reputation, which is impossible to value.

## More benefits of the service:

- 24/7 monitoring
- A reduction in costly disruptions to production
- Increased plant availability
- Minimised employee safety risk
- Fewer customer issues
- A reduction in on-costs
- Extended window of opportunity for repair and replacement
- A reduction in reactive work
- Reduced overtime
- Reduction of personnel exposure to an HV environment
- An increase in asset life
- Reduced exposure to litigation and regulatory fines
- Cable monitor can be installed on live system with no need to shut down

### Switchgear Monitoring – Astute® HV Monitor

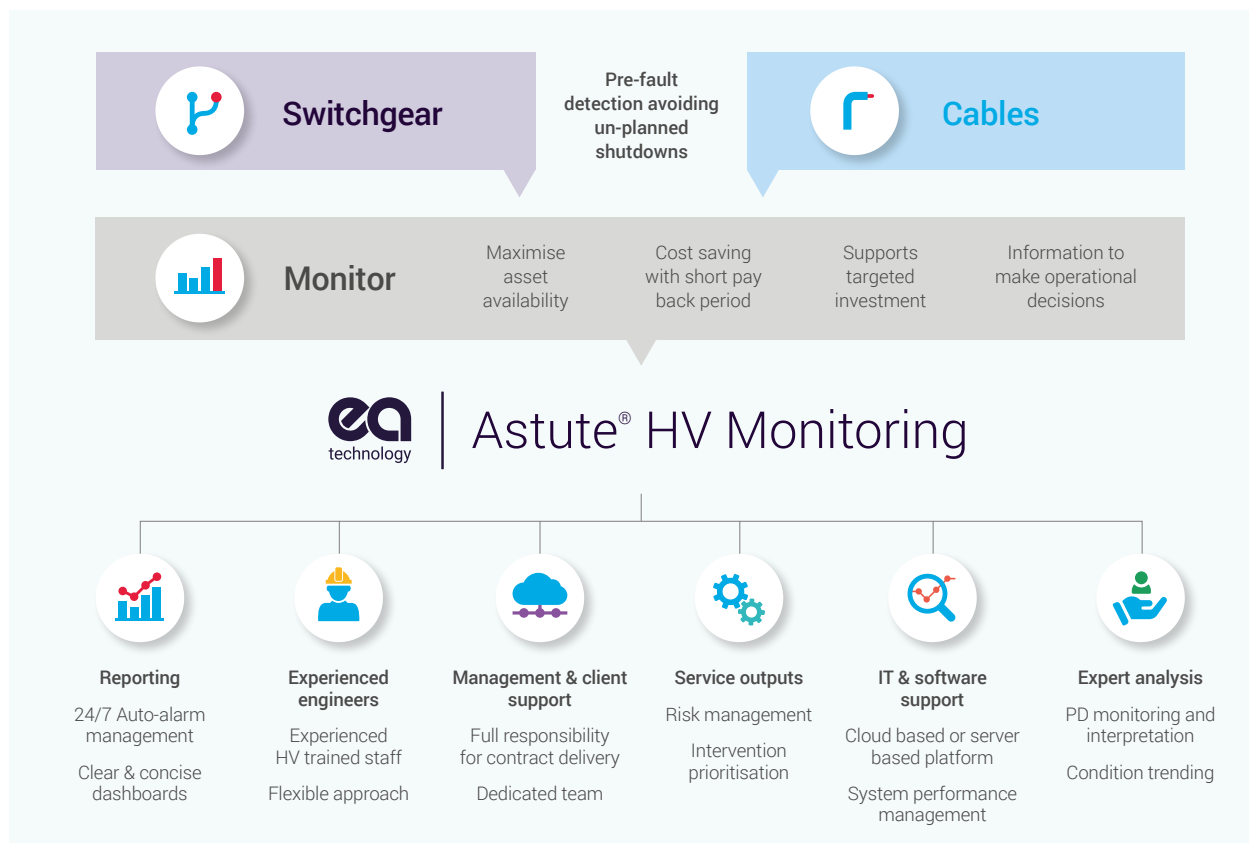


The **Astute® HV Monitor** is part of the award-winning **UltraTEV®** range. It is an advanced asset monitoring system for 24/7 monitoring of PD activity in all substation electrical assets. The **Astute® HV Monitor** is a modular system with up to 300 sensors that can be located across a switchboard to offer optimised coverage – typically without an outage being required.

### Cable Monitoring – CableData Monitor®



The **CableData Monitor®** allows us to continuously monitor and report to you on PD activity in live cable networks. This helps to reduce the need for disruptive maintenance shutdowns by highlighting high risk areas in ample time for repairs and replacements to be made if necessary. The system is a fully integrated modular system with up to 20 nodes and each system is capable of monitoring up to 180 cables.



## Astute® HV Monitoring service for switchgear

Understanding the real-time condition of your switchgear assets offers peace of mind against financial, operational and safety risks. Having the comfort that a dedicated expert is available to help you understand these risks and best practice on advice is invaluable.

## Astute® HV Monitoring for cables

New technology enables us to provide **Astute** for your HV cable network. Cables can now be monitored for PD activity 24/7 with no expensive outages for testing. Test probes simply clamp around the earth straps at one end of the cable. When problems arise, a detailed data recording is enabled, allowing our experts to analyse the signals, dismiss noise, measure severity and advise on location.

## The Astute® HV Monitoring service suite:

EA Technology knows that 85% of power failures can be attributed to PD in electrical assets. Our unique service gives companies and networks the peace of mind to trust their assets are being thoroughly monitored around the clock.

### Our service includes:

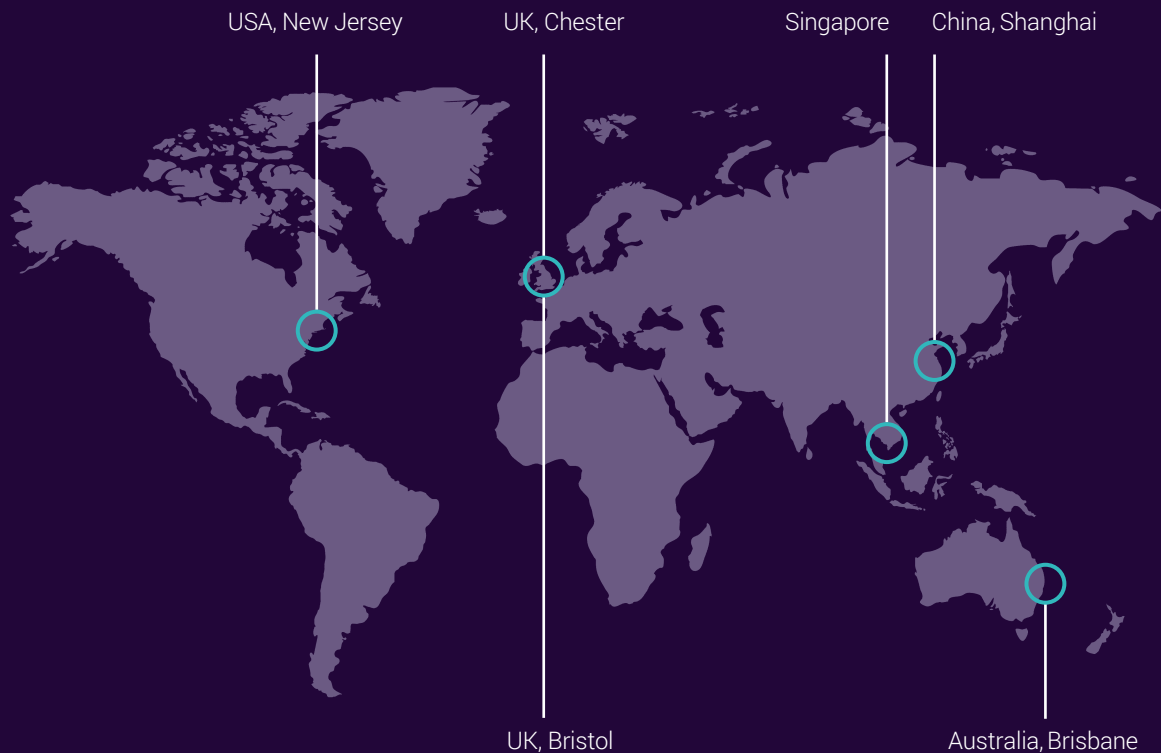
- A detailed condition benchmarking exercise
- Fully installed state of the art monitoring equipment
- Alarms for abnormal PD detections
- Condition data for inclusion into reports on asset management and planning
- Access and advice from world-leading experts

For more information please call us on +44 (0) 151 339 4181 or email us at [sales@eatechnology.com](mailto:sales@eatechnology.com)



# Global Footprint

At EA Technology we specialise in asset management solutions for owners and operators of power network assets.



Founded in 1966 we have over 50 years' experience in the industry and 6 regional offices around the world to support our global customer base.

We help clients to safeguard their networks. Advising them on strategy and implementation of a range of technology solutions to manage power assets, delivering maximum life and minimising cost



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