

PD Monitor GIS™

24/7 partial discharge (PD) monitoring system for
gas insulated switchgear (GIS) of 110kV and above

For maintaining the reliability of mission critical assets

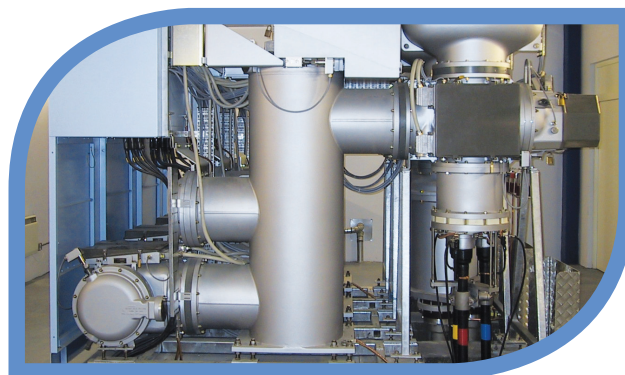
www.eatechnology.com

PRODUCT CODE: PDMGIS

Delivering Innovation in **Power Engineering**

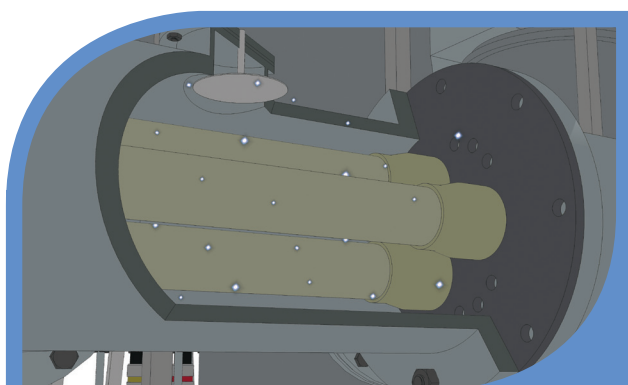
PD in GIS assets

- Undetected PD activity is a major factor in GIS failures
- GIS switchgear should ideally be PD-free to maintain reliability
- PD levels as low as 5pC can cause problems

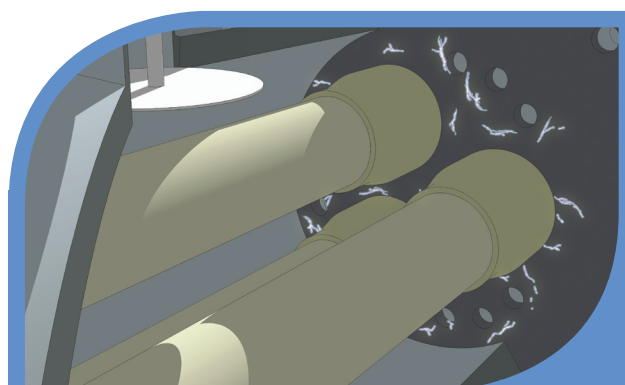


Healthy GIS installations should be PD-free

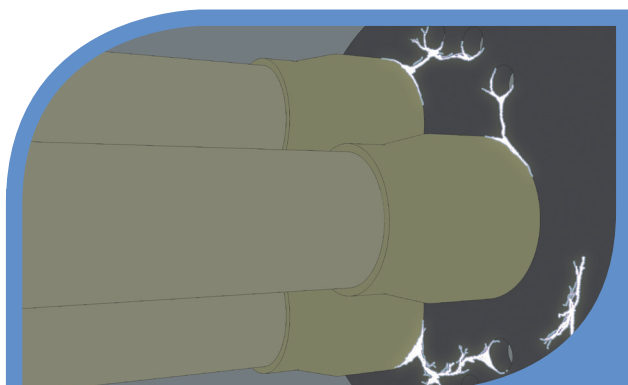
5 main causes of PD in GIS



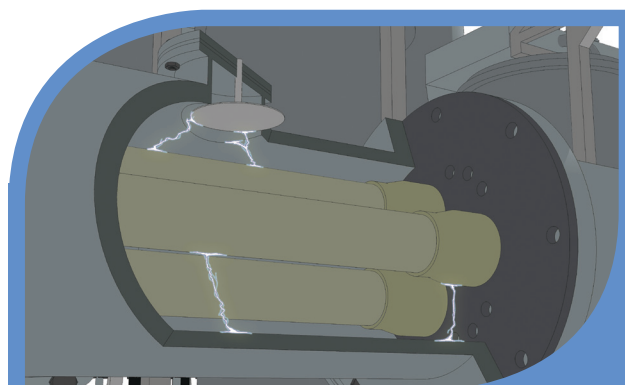
Free moving metallic particles



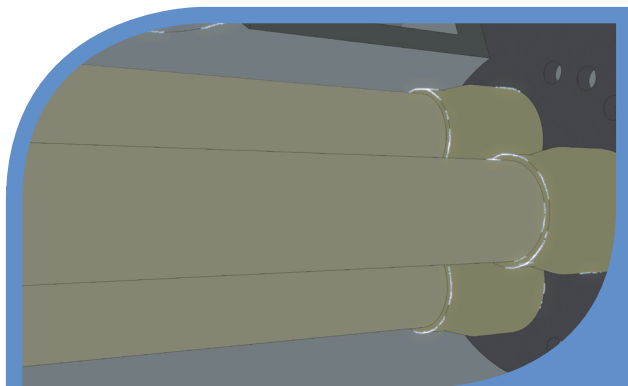
Conducting particles on insulator surface



Voids in insulator cast resin



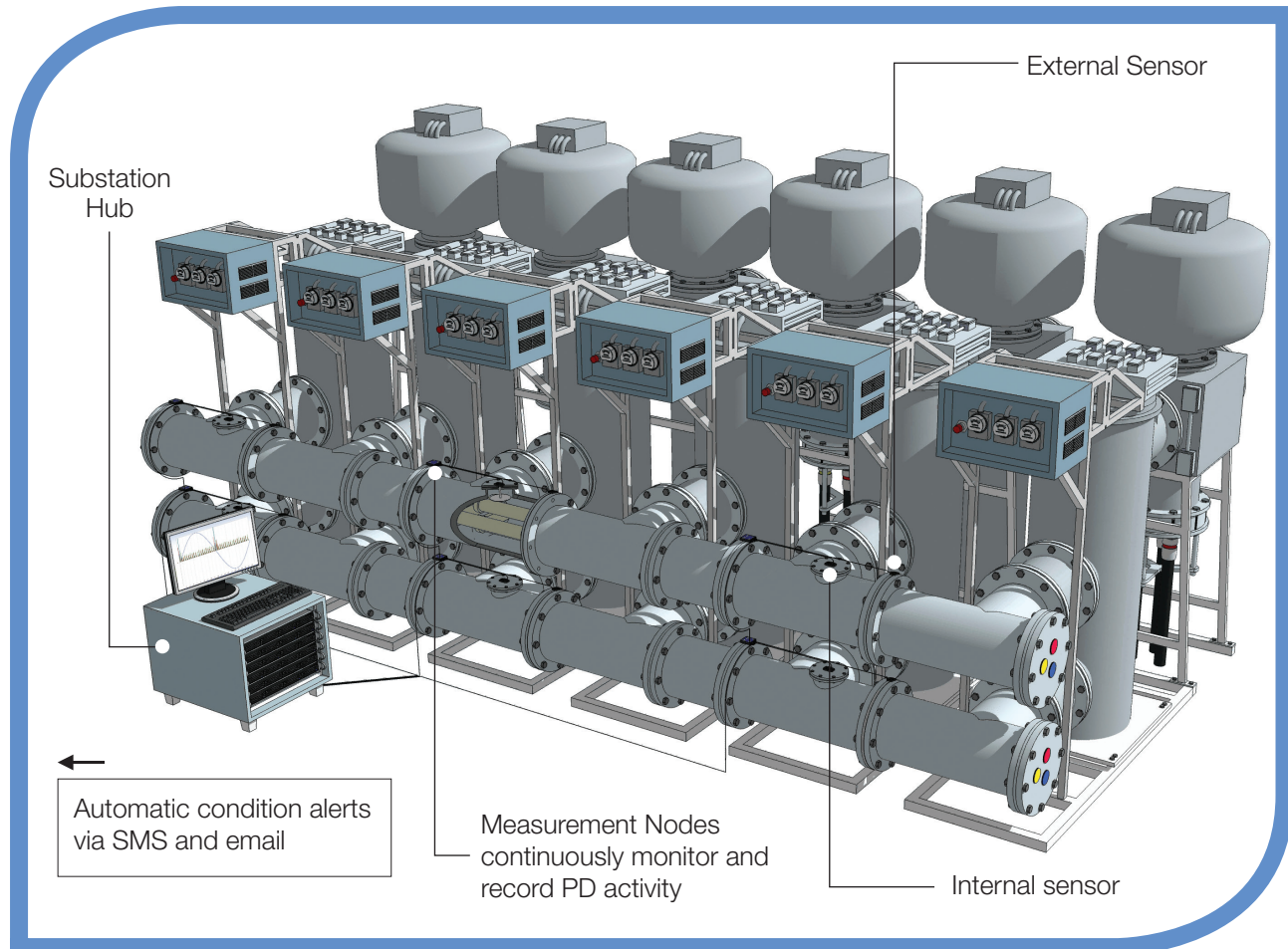
Contact noise from support brackets



Corona emanating from sharp points

PD Monitor GIS™

gas insulated switchgear monitoring system



cost-effective outage prevention

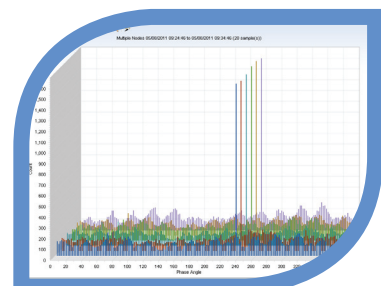
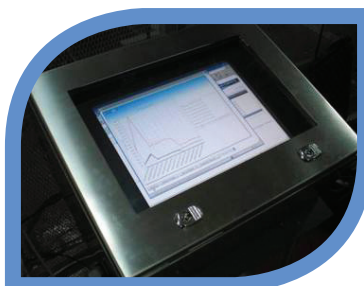
The PD Monitor GIS™ is the most cost-effective retro-fit available, to maintain reliability in pressurised GIS installations of 110kV and above.

The system can simultaneously monitor assets 24/7 at over 50 sensor points. It automatically transmits alerts when PD activity reaches critical levels, with user-configurable thresholds.

essential condition data

The system automatically produces easy-to-read graphical reports on PD activity as:

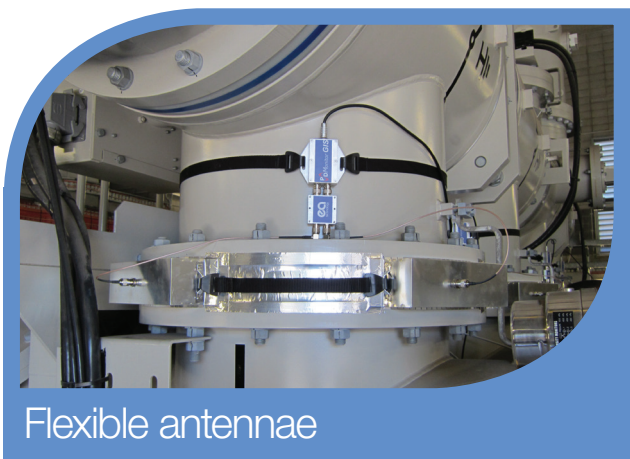
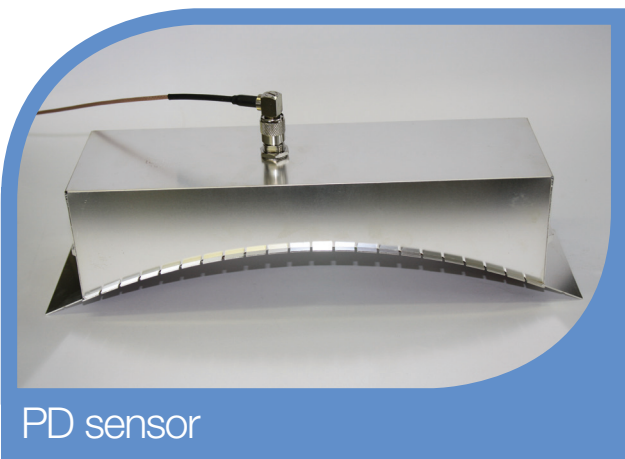
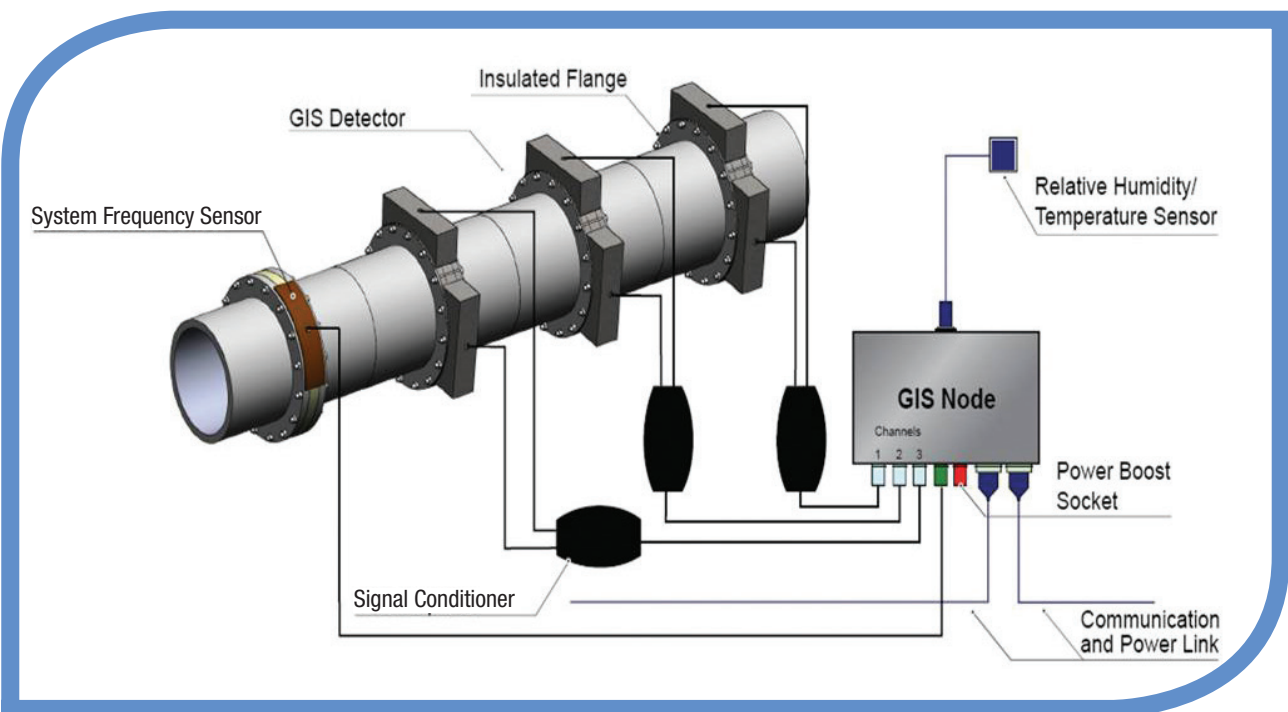
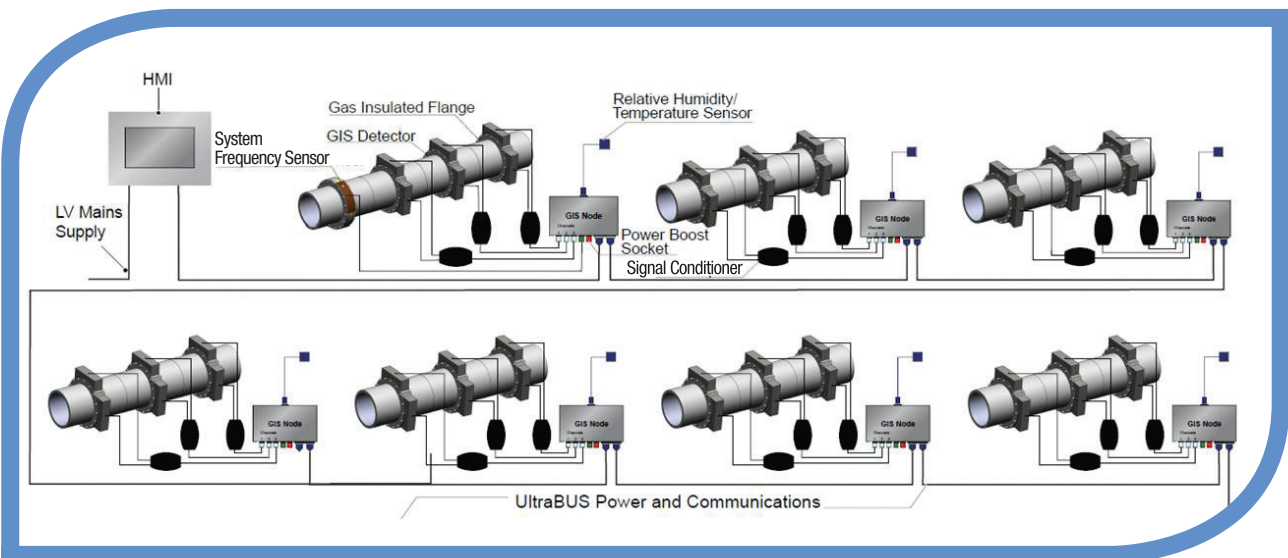
- Location
- Rate
- Magnitude
- Severity (magnitude + rate)



Delivering Innovation in **Power Engineering**

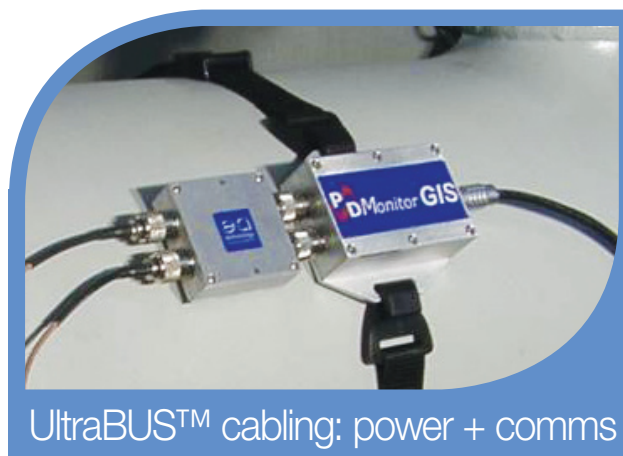
PD Monitor GIS™

system overview





Signal conditioner



UltraBUS™ cabling: power + comms



Node



PC hub

The PD Monitor GIS™ is the product of EA Technology's 35 year+ leadership in PD location and measurement

benefits

- Cost-effective retrofit for 110kV GIS and above
- 24/7 monitoring of all GIS assets, with auto-alerts
- Instant outage early warning system
- Accurate PD information means shorter repair downtime
- Trend and store PD and asset condition data over years

features

- Easy retrofit to cast resin spacers
- Non-disruptive, modular and flexible installation, with single-wire UltraBUS cabling
- Uniquely accurate time-of-flight PD location technology
- Automatic analysis and reporting of PD activity
- Remote web access to all monitored data

PD Monitor GIS™

typical installations



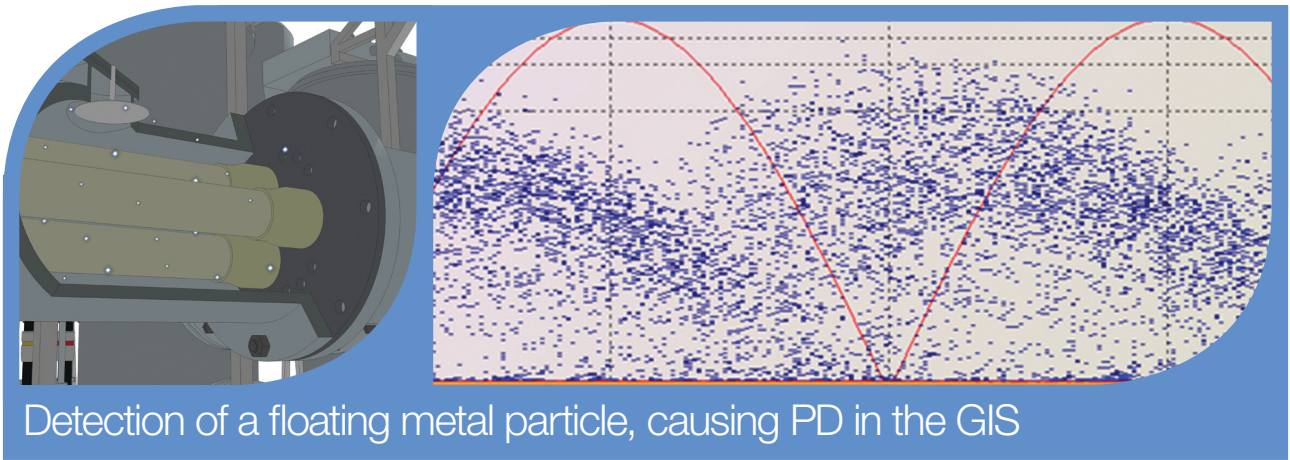
PD Monitor GIS™ sensors are simply attached to the outside of assets and easy to move for reconfiguration. More than 50 sensor points can be connected neatly to the hub, using the system's single-wire UltraBUS™, which integrates power and data communications.



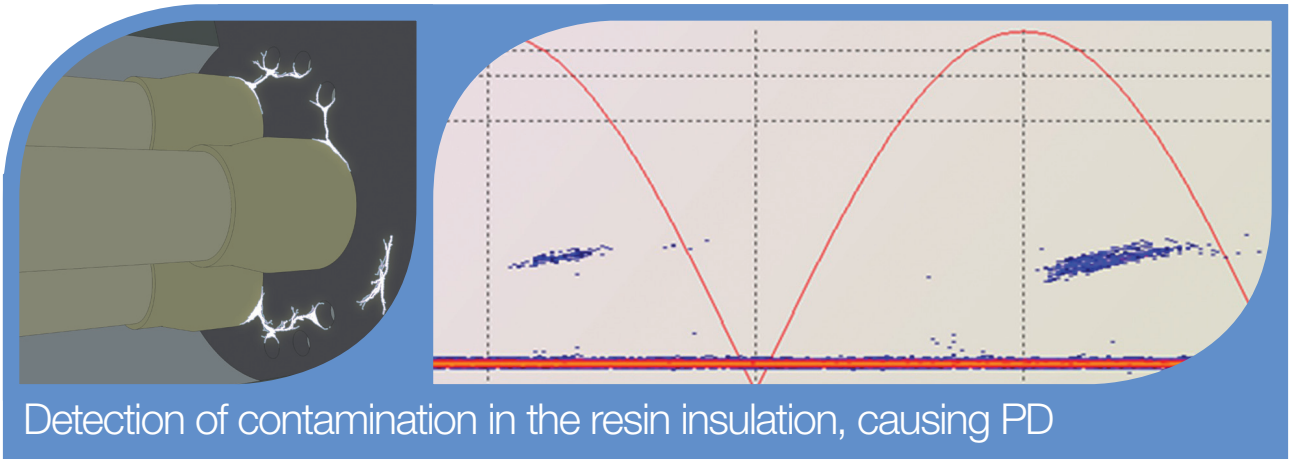
PD Monitor GIS™

example results

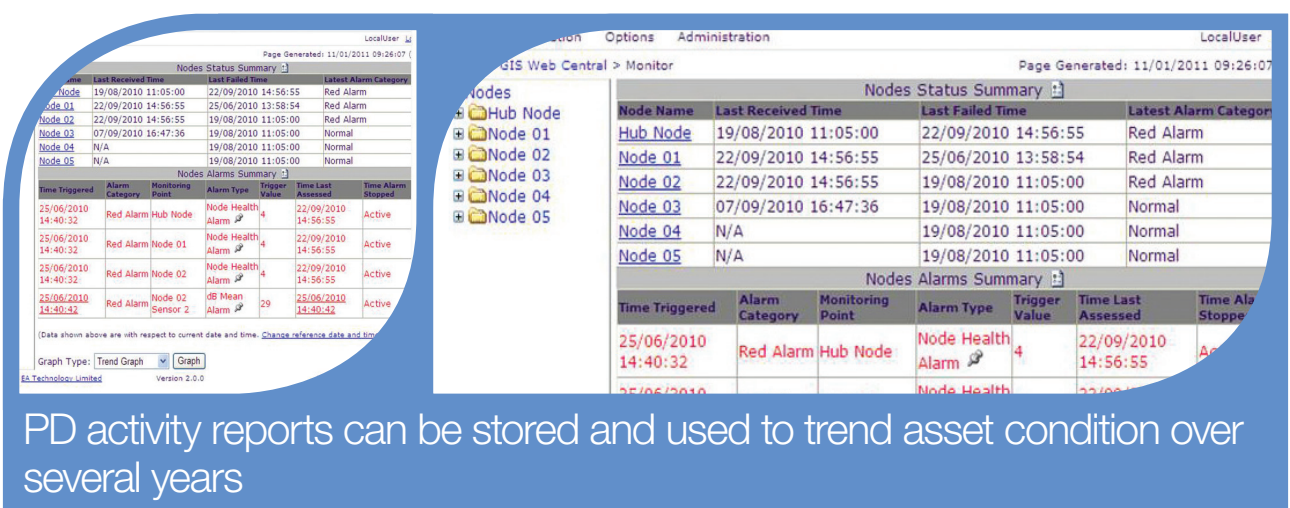
floating particle



trapped particle



PD activity and alarms report



Call us now to discuss how we can help prevent outages in your GIS installations.



See our latest podcasts at: www.eapodcasts.com

EA Technology Limited
Capenhurst Technology Park
Capenhurst, Chester UK
CH1 6ES

tel +44 (0) 151 339 4181
fax +44 (0) 151 347 2404
email sales@eatechnology.com
web www.eatechnology.com



INVESTORS
IN PEOPLE | Gold



blah:blahdesign 10832

Delivering Innovation in **Power Engineering**