PD Hawk™

switchyard PD locator

SAFELY locates internal Partial Discharge (PD) activity in open terminal switchyards

www.eatechnology.com

PRODUCT CODE: PDH1

Delivering Innovation in **Power Engineering**

unique instrument

The world's most effective PD locator for switchyards

business benefits

- Prevents costly failures
- Rapid return on investment
- Gathers valuable data on asset condition
- Extends asset life

user features

- Uniquely fast & accurate
- Easy to use
- Portable & rugged
- Safe

scan a whole switchyard in minutes

1. Switch on – the PD Hawk™ is instantly ready for action
2. Sweep the switchyard for radio emissions
3. Filter out irrelevant emissions e.g. mobile phone, television signals and non-destructive corona activity
4. Watch/listen to readings as they peak, to focus on the source of emissions
5. Rotate instrument for polarity, to locate strongest signals
6. Use pulse mode to confirm emissions are PD
7. Note the severity and location of PD emissions
8. Rate the health of the asset and its risk of failure
9. Decide whether to investigate further and/or intervene

fast focus on internal PD

The PD Hawk™ measures emissions in the 47 – 1000 MHz frequency range but is factory tuned to focus around 800MHz, which is typical of internal PD activity. This enables the operator to disregard non-PD emissions, including harmless corona activity, and eliminate false readings.

The operator can listen to emissions via the built-in speaker and/or over headphones and/or view them on menu-driven screens, which display them as:

Frequency

Tunes out interference/corona

Magnitude

Locates problem assets

Pulse timing

Identifies signal type

Locate internal PD activity in:

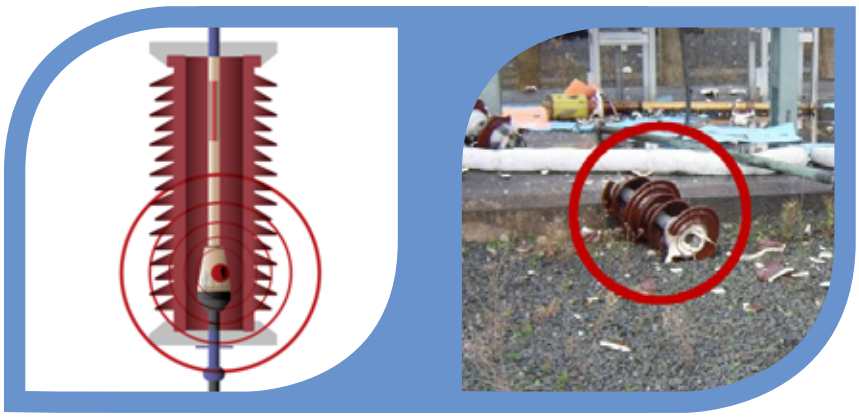
- Instrument transformers
- Circuit breakers
- Isolators
- Disconnectors
- Surge arrestors
- Cable sealing ends

cost-effective outage prevention

The first sign of problems in switchyard assets is often sudden failure, causing expensive damage and outage.

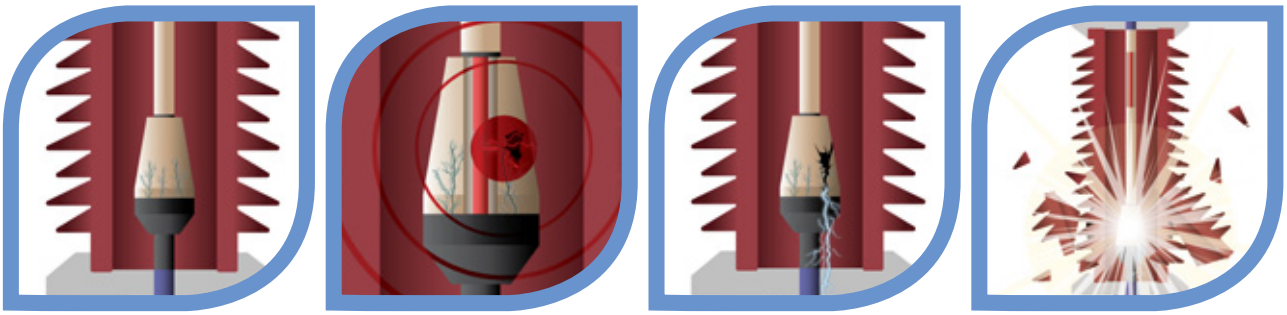
The PD Hawk™ identifies problems in assets BEFORE they fail, at a fraction of the cost of a single outage.

PD scanning identifies problems BEFORE they lead to failures



Undetected PD often leads to sudden failure

example: internal PD failure



1. PD starts to erode insulation
2. PD activity, damage and detectable emissions increase
3. Undetected PD causes flashover and sudden failure
4. Sudden failure can be explosive

PD Hawk™ specifications

MEASUREMENT	
Sensor	UHF Directional Antenna
Measurement Bandwidth	47 – 1,000MHz
Resolution	1dB
Accuracy	±1dB
HARDWARE	
Enclosure	Self-coloured vacuum formed plastic case
Indicators	Color back-lit LCD Charging indicator LED
Controls	2 off Rotary Encoders with Push-Buttons
Connectors	2.1mm LV DC Charger Input 3.5mm stereo headphone socket
Headphones	Min. 8 ohms
ENVIRONMENTAL	
Operating Temperature	0 – 55 degrees C
Humidity	0 – 90% RH non-condensing
IP Rating	65

DIMENSIONS	
Size	420mm x 420mm x 120mm
Weight	2.4kg
POWER SUPPLIES	
Internal Batteries	3.7V 6.8Ah Lithium-Ion
Typical Operating Time	approx. 8 hours
Battery Conservation	Automatic ‘switch off’ when low battery detected
BATTERY CHARGER	
Rated Voltage	90 – 264V AC
Frequency	47 - 63Hz
Charging Voltage	18V DC
Charging Output Current	0.7 A
Battery Charging Current:	2.6 A @ 4.2V
Time for Full Charge	3 hours
Dimensions	74mm x 44mm x 34mm
Weight	0.12 kg
Operating Temperature	0 - 40 degrees C
Humidity	20 – 85% RH non-condensing

Watch the PD Hawk™ ONLINE VIDEO at **www.eatechnology.com/pd-hawk**

Contact us now to learn more

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