

UltraTEV Detector²™ increases worker safety around energized equipment

Partial discharge can lead to catastrophic flashover and increase the likelihood of arc flash. The UltraTEV Detector² is a simple low-cost device that can alert workers to the presence of partial discharge before working around dangerous energized gear



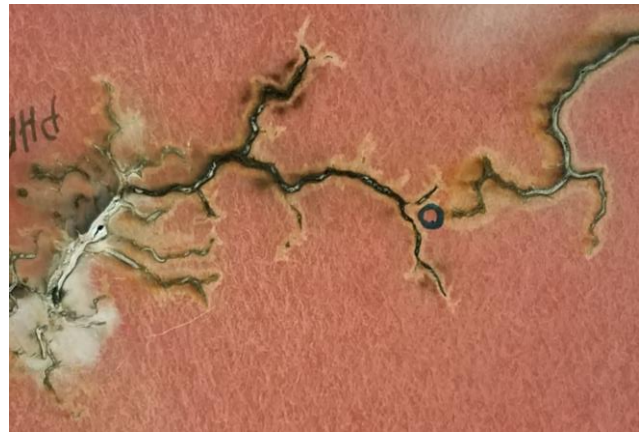
Background

Partial Discharge can occur in any electrical equipment operating above 2500V and can lead to devastating results. It occurs in the presence of high voltage field stress and is often undetected until it is too late.

Because the tracks left by surface discharge are conductive, voltages can bridge the insulation and cause a short circuit to ground. Even worse, the short to ground may not occur until the equipment is being operated, leading to **arc flash**.

Arc flash is the leading killer of electrical workers. The NFPA estimates there are 5-10 arc flash incidents and **1 death every day in the US**.

No tool can detect every hazard and tools are no substitute for safe work practices but being able to detect hazardous conditions before an incident occurs can increase safety dramatically.



Increasing safety

Partial discharge cannot be detected by any of the typical test equipment carried by line workers. Specialized tools are required. Corona cameras can detect surface discharge but require a line of sight. This makes them useless for metal clad switchgear. They are very expensive and fragile. IR cameras need line of sight as well.

The **UltraTev Detector² (UTD2)** is the second generation personal safety PD instrument from EA Technology. For over 10 years electrical workers have relied on the simple and easy to use UltraTEV Detectors for added safety. The UTD2 can find partial discharge in metal clad switchgear and enclosed spaces without the need to open panels or doors.





UltraTEV Detector²

The UltraTEV Detector² is the latest upgrade to the award winning UltraTEV range. Using dual sensor technology the UltraTEV Detector² is the 'first pass' asset condition testing device you cannot afford to be without.

Features

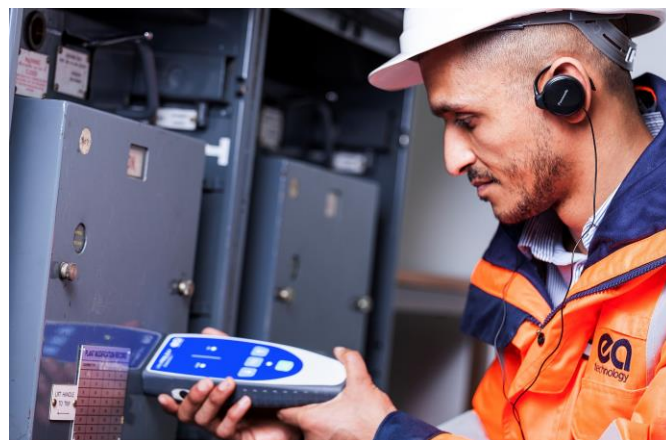
- Dual-sensor technology
- Ultrasonic sensor detects surface Partial Discharge (PD) activity beyond audible range.
- Transient Earth Voltage (TEV) sensor detects internal PD activity.
- Both sensors are pre-set to indicate when PD activity is above acceptable thresholds
- Audio output allows effective discrimination between surface PD and noise.

Clear display

- **Green LED** indicates that no significant PD is present.
- **Amber LED** (TEV mode only) indicates PD activity that requires more frequent monitoring.
- **Red LED** indicates PD activity that requires immediate investigation - and is potentially dangerous to equipment and personnel.

Easy-to-use

- One button operation with instant start-up.
- Light, portable and ergonomically designed.
- Kit complete with carrying case, clip on headset, mains battery charger, USB car charger and instruction manual



Benefits

- Essential personal safety device – use before entering a substation or working around energized switchgear
- Identify faults BEFORE they lead to failures – prevent injuries and equipment failure
- Test for critical PD activity instantly – no need to de-energize or wait for results
- Detect surface AND internal PD activity – find unseen problems instantly
- Minimal training requirement – typically 30 minutes of training required. No settings
- Low cost, high productivity – rugged and designed for many years of life



Find this before disaster strikes