



## UltraTEV Plus+™

multi-functional Partial Discharge (PD) instrument

All the features of our award-winning UltraTEV Detector™ - plus a great deal more

## benefits

- Measures accurate data on PD activity
- Works with many different types of assets
- Highly user friendly with little training required
- Low ownership cost - one instrument replaces several
- Excellent value and return on investment

## features

- The core functionality of the UltraTEV Plus+™, is a combination of our UltraTEV Detector™ and UltraMet Plus+™ – all in one hand-held instrument
- Detects and measures PD activity as numerical values for both ultrasonic and TEV emissions
- Menu-driven backlit color screen and keypad.
- Locate and listen to ultrasonic PD activity with headphones included
- Switchable modes: one-shot PD detection or continuous measurement
- Lightweight, ergonomically designed and tough.
- Long-life rechargeable internal Lithium-Ion (Li-Ion) battery
- Standard headphone socket and external ultrasonic sensor port

## valuable data for power engineers

Detecting and measuring Partial Discharge (PD) activity is the key to understanding the condition of your Medium Voltage (MV) assets – and achieving greater electrical system reliability and safety.

With the UltraTEV Plus+™ you can instantly check whether:

- Equipment is free of partial discharge
- PD activity is at a level which warrants further investigation
- Activity is at a level which requires immediate maintenance intervention
- Plant is in a dangerous condition

## multiple functions

The UltraTEV Plus+™ combines the functionality of our UltraTEV Detector™ and UltraMet™ – all in one hand-held instrument.

This amazingly versatile instrument is designed to provide power engineers with:

- Ultrasonic detection of surface PD activity as numerical values AND as audible signals, which you can hear through the headphones provided
- Measurement of internal PD activity in the form of Transient Earth Voltage (TEV) signals, which you can view on screen as numerical values
- Continuous PD measurement mode, incorporating displays of maximum level, pulse count per cycle, severity level etc
- Single shot PD measurement function also provided
- UltraDish™ waveform concentrator with laser pointer option for overhead line equipment



Menu-driven, multi-functional display of TEV and ultrasonic values.

## multiple uses

Use the UltraTEV Plus+™ to:

- Investigate UltraTEV Detector™ 'red lights'
- Rapidly survey the condition of entire substations
- Compare changes in PD activity levels between assets and over time
- Gather valuable data for asset condition assessment
- Check working environments for safety



Optional external microphone extends reach.

## UltraTEV Plus+™ service pack

When you purchase an UltraTEV Plus+™, we can provide you with an additional condition assessment Service Pack.

- Baseline PD survey of up to 30 assets
- On-site training in use of UltraTEV Plus+™ by our expert technicians
- 12 month technical support
- FREE instrument calibration after 12 months



The UltraDish™ has a precision laser sight built in.

# specification UltraTEV Plus+™

## TEV

Measurement Range	0 – 60 dBmV
Resolution	1dB
Accuracy	±1dB
Max Number of Pulses/Cycle	655

## ULTRASONIC

Measurement Range	-7 dBµV to 68dBµV
Resolution	1dB
Accuracy	±1dB
Transducer Sensitivity	-65 dB (0dB = 1volt/µbar rms SPL)
Transducer Centre Frequency	40 kHz
Transducer Diameter	16mm
Heterodyning Frequency	38.4 kHz

## HARDWARE

Enclosure	Self-coloured injection moulded plastic case
Indicators	Colour back-lit LCD Charging indicator LED
Controls	Membrane keypad
Connectors	2.1mm LV DC charger input 3.5mm stereo headphone socket External Ultrasonic sensor
Headphones	Min. 8 ohms
Battery Charger	90 - 264V 47 - 53Hz, 6V 0.5A

## ENVIRONMENTAL

Operating Temperature	0 – 55 degrees C
Humidity	0 – 90% RH non-condensing
IP Rating	54

## DIMENSIONS

Size	205 x 72 x 35mm
Weight	0.3kg

## POWER SUPPLIES

Internal Batteries	3.7V 3.6Ah Lithium-ion
Typical Operating Time	approx. 5 hours
Battery Conservation	Automatic 'switch off' when low battery voltage detected or 10 minutes elapsed

## BATTERY CHARGER

Rated Voltage	90 – 264V AC
Frequency	47 - 63Hz
Operating Temperature	0 - 40 degrees C
Humidity	20 – 85% RH non-condensing

## add-ons



### Kit 1

Function checker, clip-on earphones, battery charger and carrying case with high density foam insert

### Kit 2

Deluxe neckband headset, ultrasonic contact probe, flexible microphone sensor, function checker, battery charger and ruggedized storage case with high density foam insert

### Kit 3

Deluxe neckband headset, ultrasonic contact probe, flexible microphone sensor, ultradish waveform concentrator with laser pointer, function checker, battery charger and ruggedized carrying case with high density foam insert

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



Improving Network Performance



Facilitating Low Carbon Energy



Delivering New Technology



Developing Your Team



Communicating the Message

