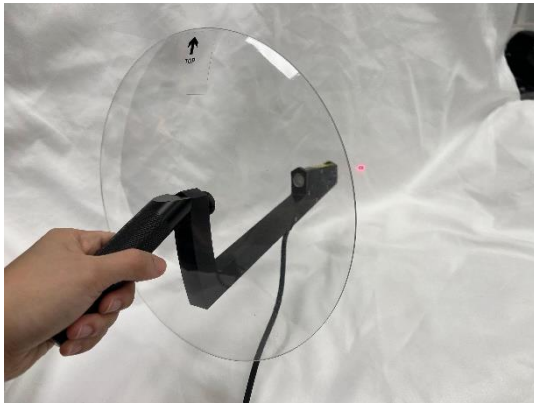


Parabolic Reflector Handheld Accessory



Parabolic Reflector is an ultrasonic sensor for use when detecting partial discharge activity on exposed insulating surfaces. The reflector increases the sensitivity of the sensor allowing detection to be effective at up to 30m . It is commonly used in outdoor switchyards and transmission lines to detect surface discharge on string and post insulators, sealing ends and other exposed equipment.

Use of Parabolic Reflector

With the Parabolic Reflector connected to the **PD Detector or PD Detector Pro**, the reflector should be pointed at the HV equipment being inspected.

The PD Detector / Pro instrument should be operated in AE Mode and it will register a dB reading on the user display. It will also generate an audible output according to the level of activity detected.

It is recommended that when using the Parabolic Reflector out of doors, the headphones are worn in order to minimise interference from outside noise sources.

Owing to the nature of acoustic PD detection and natural variations caused by environmental conditions, it is recommended that PD levels identified are appraised according to their relative values when compared with other similar plant and not in absolute terms.



Maintenance and Servicing

- If necessary, clean the equipment with a damp cloth. Do not use solvents as this may damage the surface.
- After use, the equipment should be disassembled and stowed in the carrying case.

Technical Specification

Parabolic Reflector

The parabolic dish works with the existing electronics used in our PD instruments, so conforms to the same specification. The unit is passive and so the signal processing and interpretation is done by the main units.

www.ipec.co.uk

Measurement

Measurement Distance	30 metres (optimised for 15m)
Measurement Range	-10dB μ V to +70dB μ V (With PDD Pro)
Resolution	1dB
Accuracy	\pm 1dB
Transducer Centre Frequency	40 kHz
Transducer Sensitivity	-65dB min at 40 kHz (0dB = 1 volt/ μ bar RMS SPL)
Recommended Load Impedence	1M Ω
Transducer Diameter	16 mm
Laser Pointer	645nm to 665nm Class IIIA

Hardware

Dish External Diameter	255 mm
Assembled Parabolic Size	360 x 255 x 255mm
Kit Weight	0.53 kg
Operating Temperature	-0 to 50°C
Output Connector	TRS (Stereo Jack) – PD Detector Multi sensor plug – PD Detector Pro
Laser Dot Power	45mW
Laser Dot Size at 30m	40mm



The Parabolic Reflector can be used with:

PD Detector
PD Detector Pro

sales@ipec.co.uk