

ULTRASONIC CORONA/ARCING DETECTOR




# PULD-40

The PULD-40 is an ultrasonic detector designed for corona and arcing inspections for predictive maintenance in electric utilities.

amperis

[www.amperis.com](http://www.amperis.com)

 AMPERIS PRODUCTS S.L  
Agricultura, 34  
27003, Lugo, Spain

 Contact

+T [+34] 982 20 99 20 | F [+34] 982 20 99 11  
info@amperis.com | [www.amperis.com](http://www.amperis.com)

## Detection of Electrical Arcs and Corona Effects

Electrical arcs in the air and corona effects emit sounds and ultrasounds. The role of the PULD-40 consists of capturing emitted ultrasounds and of translating them into the audible range. The PULD-40 accurately pinpoints and identifies corona effects and arcs that may be encountered on any type of high voltage installation simply by scanning around the suspected area. The PULD sensor is positioned in a directional amplifier cone that is integrated in the front of the enclosure. An external parabolic sensor, which enables the user to pinpoint electrical defects from a longer distance, is also available. It easily connects on the side of the PULD and what's more, it is equipped with a laser pointing device which enables pinpointing the ultrasound emission source. The dismountable parabolic antenna and the small dimensions of the PULD facilitate its use in the field and allow access to any type of installations.

### Advantages

Insulation flaws are an important factor in wear, efficiency loss and lifespan reduction of an electrical network. Nowadays, it is important to be equipped with good tools in order to reduce operational costs and save valuable time. The PULD-40 enables making remote acoustic inspections with great accuracy. The equipment is user friendly and does not necessitate any training whatsoever. One of the advantages of the PULD-40 is that it works just as well in noisy environments. The applications of the PULD-40 are countless and make it a global leak detection tool: a must for any prevention / maintenance department.



**Detail of the integrated sensor and amplifier cone.**



**Application example: to detect corona effects on overhead electrical insulators.**

### Main Applications

- Electrical Inspections: corona effect localization, arcs on shields.
- General Mechanical Inspections: motors, compressors, gears, bearing monitoring.
- Gas, air, pressure leaks, leak detection without pressure or vacuum.
- Aerospace Sector: airplane doors and windows, air tightness.

The PULD-40 is used in many sectors: electricity, aerospace, the chemical and petrochemical industries, manufacturing, pulp and paper, textile, waste water processing, etc



**Close up of the external sensor and headset connections**

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## Technical Specifications

- 7-segment display in relative dB-mode
- 90 dB dynamic range display
- Built-in sensor with 5 degrees conical directivity
- I-Integrated Speaker
- Center frequency 40 KHz
- Bandwidth 38kHz-48kHz
- Audio output for headset or PC recording
- Rechargeable Lithium-ion battery
- 4 hours autonomy
- Rugged Delrin-made casing
- Detects .005"(.127 mm) dia. leak @ 5 psi (.34 bar) at a distance of 25 ft (8m)



## Options

- Headset
- Parabolic sensor with 1 degree directivity and laser pointer
- Transportation case

