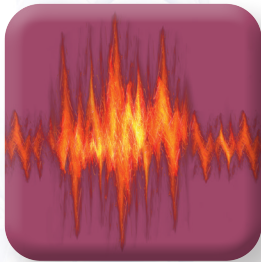


# ndb

Advanced and  
Innovative Solutions



## ULD-40™ Ultrasonic Corona & Arcing detector

The ULD-40™ is an ultrasonic detector designed for corona effect and arcing detection for predictive maintenance in electric utilities. Available with a variety of accessories, this instrument is a cost-effective must for any prevention plan.

### FEATURES

- ⚡ Works just as well in noisy environments
- ⚡ Countless number of possible applications
- ⚡ Battery operated for maximum flexibility
- ⚡ Easy to use
- ⚡ Parabolic sensor with laser for optimal pinpoint testing

### DETECTION OF ELECTRICAL ARCS AND CORONA EFFECTS

Electrical arcs in the air and corona effects emit sounds and ultrasounds. The role of the ULD-40™ consists of capturing emitted ultrasounds and translating them to the audible range. The ULD-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 ULD-40™ 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 ULD-40™ and what's more, it is equipped with a laser pointing device which enables pinpointing the ultrasound emission source. The dismantlable parabolic sensor and the small dimensions of the ULD-40™ facilitate its use in the field and allow access to any type of installations.



ULD-40 ultrasonic leak/corona detector

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## TECHNICAL SPECIFICATIONS

|                                      |   |
|--------------------------------------|---|
| <b>Dynamic Range</b>                 | 96 dB   |
| <b>Center Frequency</b>              | 40 kHz  |
| <b>Bandwidth</b>                     | 38 kHz to 48 kHz  |
| <b>Output Frequency for 40 kHz</b>   | 2.4 kHz   |
| <b>Sampling Frequency</b>            | 120 kHz   |
| <b>Battery Type</b>                  | Lithium Ion   |
| <b>Battery voltage and current</b>   | 3.6 V 750 mA  |
| <b>Recharging Voltage</b>            | 5 V   |
| <b>Autonomy</b>                      | 4.0 hrs   |
| <b>Charge time</b>                   | 2.5 hrs   |
| <b>Power consumption</b>             | 160 mA  |
| <b>Sensitivity</b>                   | <ul style="list-style-type: none"> <li>• Dia. Leak 0.005 " @ 5 psi 10 feet</li> <li>• Dia. Leak 0.125 mm @ 0,35 Bar 3 meters</li> </ul> |
| <b>Audio output impedance</b>        | 32 ohm  |
| <b>Audio output level</b>            | 1 Volt peak-peak  |
| <b>Audio output center frequency</b> | 2.4 kHz   |



Parabolic sensor for corona effect detection



Built-in acoustic sensor



Contact acoustic sensor for partial discharge detection in metalclad cabinets



Built-in speaker

## 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 ULD-40™ enables making remote acoustic inspections with great accuracy. The equipment is user friendly and does not necessitate any training. One of the advantages of the ULD-40™ is that it works just as well in noisy environments. The applications of the ULD-40™ are countless and make it a global leak detection tool: a must for any prevention & maintenance department.

## 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.

## OPTIONAL EQUIPMENT

- Parabolic sensor
- Contact sensor
- Ultrasonic simulator module
- Headphones
- Audio output cable

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