# AA Ultrasonic PD Sensor

## Airborne Acoustic Transducer

### Surface Discharge

Surface tracking and corona in air can seriously damage high voltage insulating surfaces in a way that will ultimately lead to flashover and complete failure of the insulator.

This discharge activity creates acoustic emission that can be detected using an ultrasonic sensor. The magnitude of the acoustic emission is indicative of the degree and severity of discharge activity.

### Acoustic Probe

The acoustic probe is designed for use on air insulated terminations or other HV components where there is a clear sound path between the electrically stressed insulation and the probe. The sensor is extremely sensitive and can detect activity below 10pC. The probe has a magnetic base to allow mechanical coupling to steel enclosures and a swivel head so the detecting sensor can be aimed directly at the HV point.

### Embedded Sensing

In many applications, there is no external line of sight to the HV points. The sensor can be safely embedded inside the HV equipment to give optimal detection capability.

# Technical Specification

## AA Ultrasonic PD Sensor

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| **Ultrasonic Measurements** | |
| Frequency Response | 40kHz |
| Receiving Sensitivity | -65dB min at 40KHz (0dB=1 volt/µbar RMS SPL) |
| Recommended Load Impendence | 50Ω |
| **Hardware** | |
| Sensor head swivel | 360° |
| Output Connector | BNC female |
| Coupling | Magnetic |
| Power requirements | 12VDC, 150mA |
| **Dimensions** | |
| Size | 71 x 37 x 39 mm |
| Weight | 50 g |
| Designed and manufactured in the United Kingdom | |

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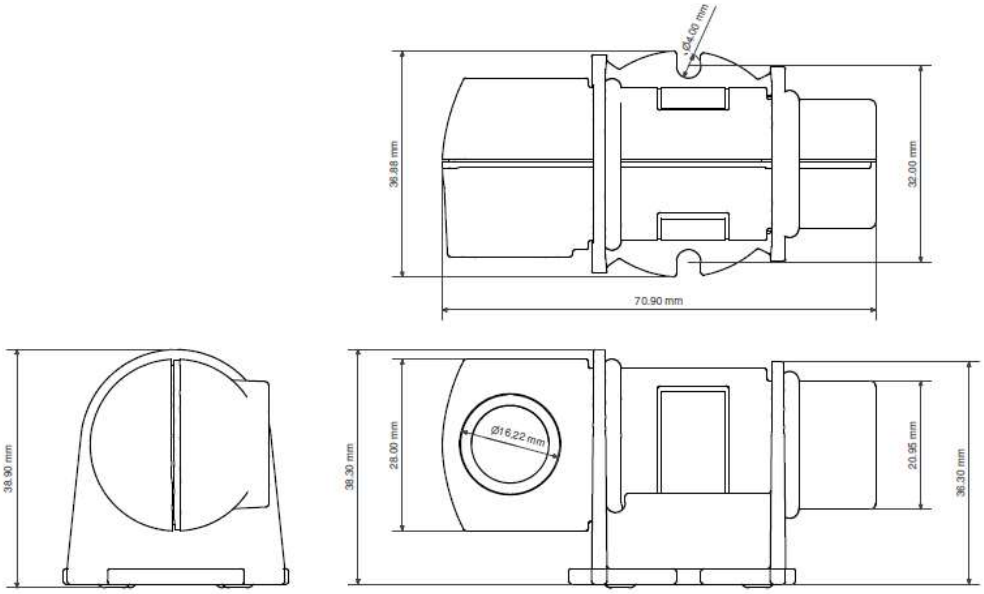


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