

#### Commercial document

DC.UTS.DAT.001

### **Datasheet ULTRASense (FU.SEN.UTS.001)**

# **Description:**

ULTRASense is a compact, airborne ultrasound sensor that connects directly to specific SDT instruments via a direct coupled LEMO7 input. It's primary design is to detect sources of airborne ultrasound including pressure leaks, electrical partial discharge, mechanical defects in belt drives, chain drives, and direct coupled shafts. ULTRASense detects signals generated by T-Sonic1 and T-Sonic9 ultrasound transmitters and is therefore applicable to tightness inspections.



# **Specifications:**

| General                               |         |  |  |  |
|---------------------------------------|---------|--|--|--|
| Description/type                      |         | Airborne ultrasound sensor             |  |  |
| Compatibility                         |         | SDT 340, ULTRAChecker                  |  |  |
| Certifications                        |         | EMC, ROHS (see DoC)                    |  |  |
| Center frequency                      | kHz     | 40 ± 1                                 |  |  |
| Useful bandwidth (-6 dB)              | kHz     | 2.0 [38.4-40.4]                        |  |  |
| Residual audible bandwidth            | kHz     | 2.25                                   |  |  |
| Sensitivity (at 40 kHz; 0dB = 1 V/Pa) | dB      | -11                                    |  |  |
| Total beam angle ( 6 dD)              | o       | Considering built-in preamplifier  55  |  |  |
| Total beam angle (- 6 dB)             | -ID     |  |  |  |
| Built-in preamplifier Environmental   | dB      | +30 (can be disabled)                  |  |  |
|                                       | °C (°E) | 20 to 70 ( 22 to 159) non condensing   |  |  |
| Operating temperature range           | °C (°F) | -30 to 70 (-22 to 158), non-condensing |  |  |
| IP rating Mechanical                  |         | 40                                     |  |  |
| Housing material                      |         | ABS/PC                                 |  |  |
| Dimensions                            |         | AB3/FC                                 |  |  |
| Difficusions                          | mm      | 259<br>Ø11,8                           |  |  |
| Weight                                | g (oz)  | 35 (1.2)                               |  |  |
| Connector                             |         | Lemo 7 pins female                     |  |  |

The information herein is believed to be accurate to the best of our knowledge.

Due to continuous research and development, specifications are subject to change without prior notice.

#### NB: Additional specifications can be found from the download section of SDT web site

| 3    |                |   |          |
|------|----------------|---|----------|
| 2    | CMA 26/07/2021 | New layout, additional picture, adding temperature range & material | RGO      |
| 1    | CGR 05/06/2019 | Original version  | СМА      |
| Ver. | Editor         | Nature of modification  | Verified |