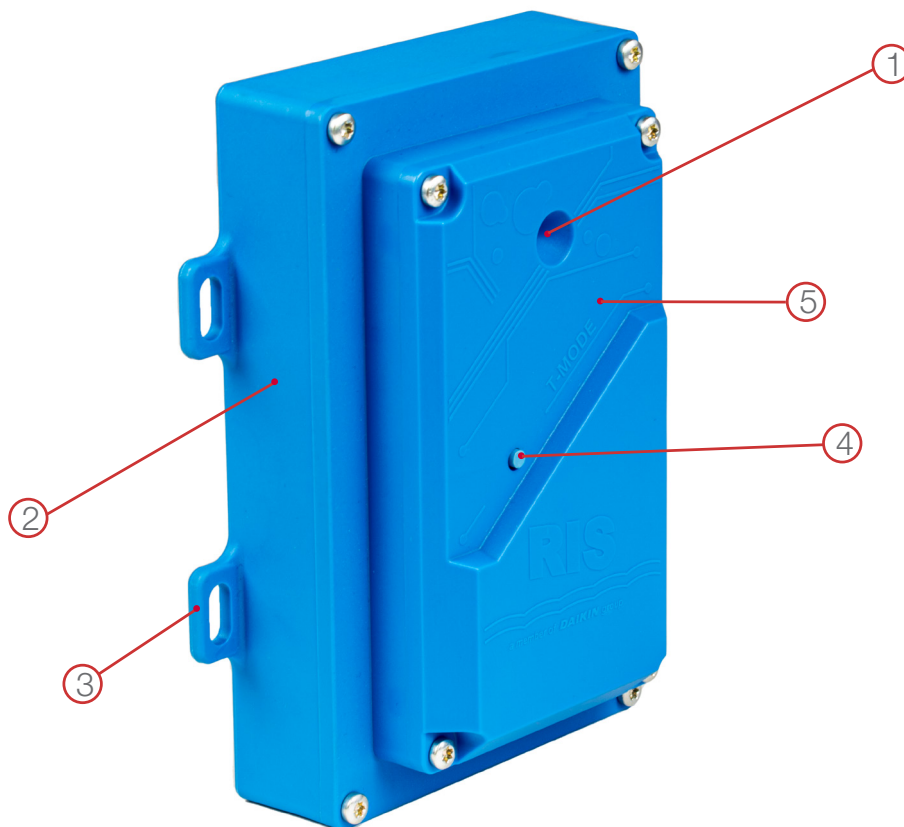


# Acoustic Sensor

## RIS FSX SENSORS – THE PREDICTIVE MAINTENANCE SOLUTION

### Sensor description

The sensor is equipped with a narrowband IoT modem, which enables uninterrupted data transmission even in buildings with many obstacles for radio waves or even when installed underground. The sensor is battery-powered and thus completely self-sufficient in combination with narrowband IoT transmission technology. The RIS-FSX acoustic sensor detects the sound pressure level by means of a directional microphone.



### Particle sensor

1. Microphone
2. Battery case
3. Brackets for sensor attachment
4. T-mode button (function test)
5. Sensor housing cover

# Acoustic Sensor

## Technical data of the acoustic sensor (ACS)

During the acoustic sensor (ACS) assembly, make sure that it is directly aligned with the object to be monitored. Please contact the manufacturer for more information on the assembly location and connection of the sensor.

### Basic data

Information	Value (unit)
Height	120 mm
Width	70 mm
Depth	30 mm
Operating temperature	-30 ~ +70 °C
Transmitting power	+14 dBm
Receive level	164 dB
Start-up time	≤1 min (≤15 min. for full measuring accuracy)
Weight incl. battery	180 ±0.2 g
Housing material	Durethan B30S

### Operating data/conditions

Information	Value (unit)
dB (X) accuracy	±5 dB, ±5 %
Measuring range	30 - 120 dB
Signal-to-noise ratio	11 SNR 94 dB SPL @ 1 kHz, A-weighted - 58 - dB(A)
Total harmonic distortion	THD 94 dB SPL @ 1 kHz, S = type - 0.05 - %
Total harmonic distortion	THD 115 dB SPL @ 1 kHz, S = type - 0.25 - %
Acoustic overload point AOP	10 % THD @ 1 kHz, S = type - 131 - dB SPL

AAF International  
European Headquarters  
Odenwaldstrasse 4, 64646 Heppenheim  
Tel: +49 (0)6252 69977-0  
aafeurope.com

RIS Facility Management GmbH  
Erlen 4, 75031 Eppingen, Germany  
+49 7262 / 208815

RIS-BG Environmental GmbH  
Kelterplatz 10, 71549 Auenwald, Germany  
+49 7191 / 903 1020  
www.ris-group.de



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