



smartPREDICT

All-in-One vibration and acoustic emission sensor system

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1 Description

The smartPREDICT consists of a leading vibration and acoustic emission sensor with a vast bandwidth, ultra-high resolution and an extensive dynamic range.

The smartPREDICT enables:

- Trending of Abnormalities
- Localization of Irregularities
- Root Cause Analysis

The corresponding software allows a sophisticated real-time analysis of detected signals. Its Power-over-Ethernet (PoE) technology enables power supply and streaming of high volume data in real-time over a single interface.

The device is designed to cover most applications. For special purposes customization concerning the interface or the case remains feasible.

For further information contact our customer service.

2 Applications

- Acquisition of structure-born sound
- Enabling of predictive maintenance of rolling element bearings and gear boxes
- Process monitoring in production lines and machinery
- Supervision of lubrication condition
- Monitoring of power tool wearout
- Record of vibration characteristics
- Operational modal analysis
- Unbalance test

3 Features

Acoustic emission/ vibration sensor

Sample Rate	96 kHz
Resolution	24 bit
SNR	99 dB
THD+N	-93 dB
Frequency Response	6 Hz - 150 kHz

Add-ons (optional)

Accelerometer	max ± 8 g;	16 bit
Gyroscope	max ± 2000 °/s;	16 bit
Magnetometer	max ± 50 gauss;	16 bit
Temperature Sensor	-40 °C - +125 °C;	± 0.25 °C

Interface (Standard)

Ethernet with PoE	10 MBit/s
Connector	RJ45

Dimensions & Mounting

Length/ Width/ Depth	83/ 42/ 23 mm
Weight	83 gram
Flange Alt. 1 (Front Panel)	72/ 53 mm
Flange Alt. 2 (Top Cover)	2x 15/ 42 mm

4 Case Drawing

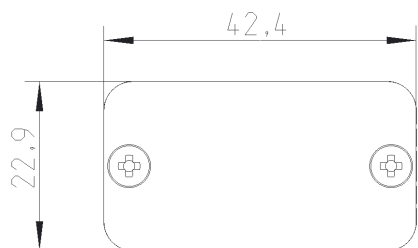


Figure 1: Front



Figure 2: Side

5 Mounting Options

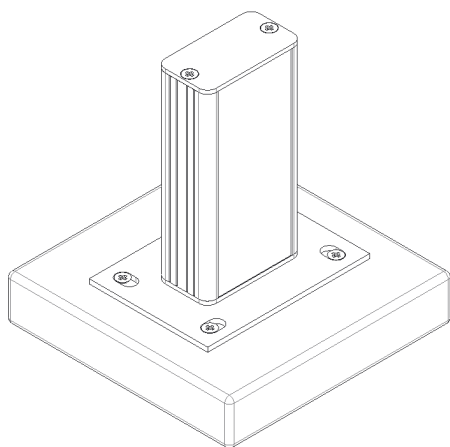


Figure 3: Alternative 1

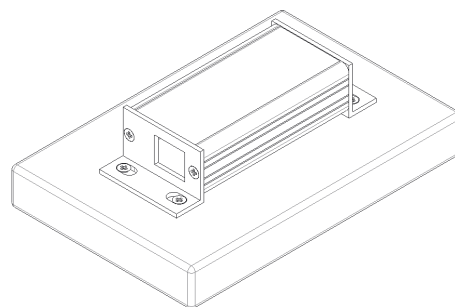


Figure 4: Alternative 2