

3-AXIS SHOCK & VIBRATION SMART PROBE



PROPRIETÀ

- Accelerometro a 3 assi
- Larghezza di banda utile CC fino a 250 Hz
- Rumore basso
- Design compatto e robusto
- Grado di protezione IP67

POSSIBILE UTILIZZO

- Monitoraggio delle vibrazioni rapido
- Analisi delle vibrazioni in tempo reale
- Analisi della frequenza e del tempo in tempo reale
- Diagnosi delle vibrazioni
- Analisi modale delle vibrazioni
- Macchine utensili - Automotive - Aviazione
- Analisi strutturale e monitoraggio sanitario

BENEFICI

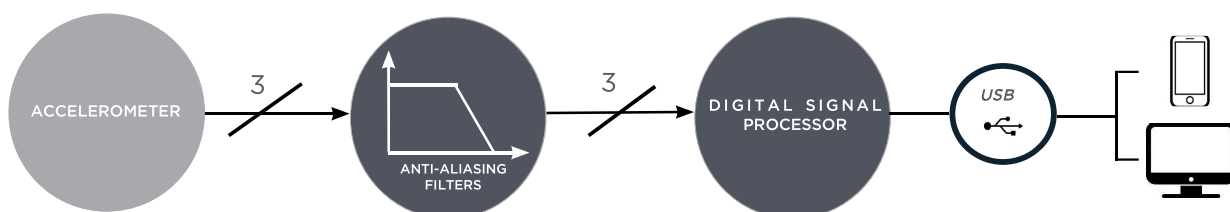
RECOVIB Feel è stato progettato per eseguire un'analisi vibratoria immediata. Collegato a un dispositivo Android o tablet e PC tramite una connessione USB. L'applicazione fornita consente lo streaming di dati di vibrazione in tempo reale su un grafico nel dominio del tempo e nel dominio della frequenza.

Durante lo streaming, è possibile registrare i dati delle vibrazioni per riprodurli e visualizzarli sullo smartphone o sul PC. Il visualizzatore consente un'analisi dettagliata delle vibrazioni registrate nel dominio del tempo e nel dominio della frequenza.

Sono disponibili varie opzioni di elaborazione del segnale: filtri passa-alto, passa-basso e passa-banda, filtri integratore (modalità velocità) e filtri a doppio integratore (modalità spostamento).

Nel dominio della frequenza, vengono offerti diversi calcoli basati su FFT: Amplitude Spectrum Peak e RMS, Power Spectrum, Power Spectral Density e Amplitude Spectral Density

BLOCK DIAGRAM



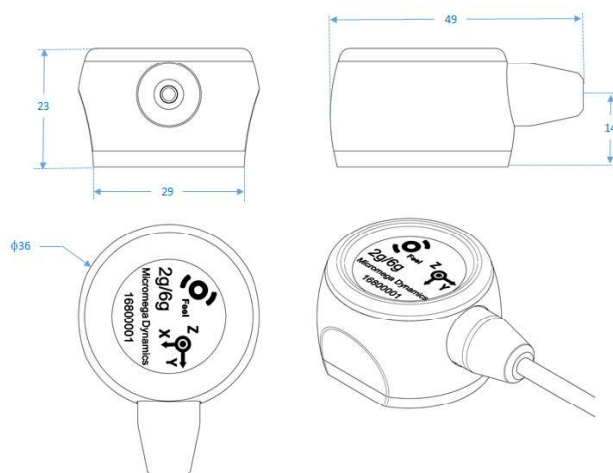
CERTIFICATIONS

	STANDARD	STANDARD REFERENCE	LIMIT LEVEL
EMC COMPLIANCE	Radiated Emission	EN 55016-2-3/CISPR 16-2-3	EN/IEC 61000-6-3 30MHz-1GHz
	Electrostatic discharge immunity	EN/IEC 61000-4-2	4kV by contact 2,4 & 8kV in air Criterion B
	Magnetic Field Immunity	EN/IEC 61000-4-8	30 A/m 50 & 60 Hz Criterion A
	Radiated, radio-frequency, electromagnetic field immunity	EN/IEC 61000-4-3	80 MHz - 1GHz 10V/m 1.4-2.0 GHz 3 V/m 2.0-2,7GHz 1V/m AM 80% 1kHz Criterion A
DUST & WATER INGRESS PROTECTION LEVEL	Degree of Protection provided by enclosures (IP code)	IEC60529	IP67

SPECIFICATIONS

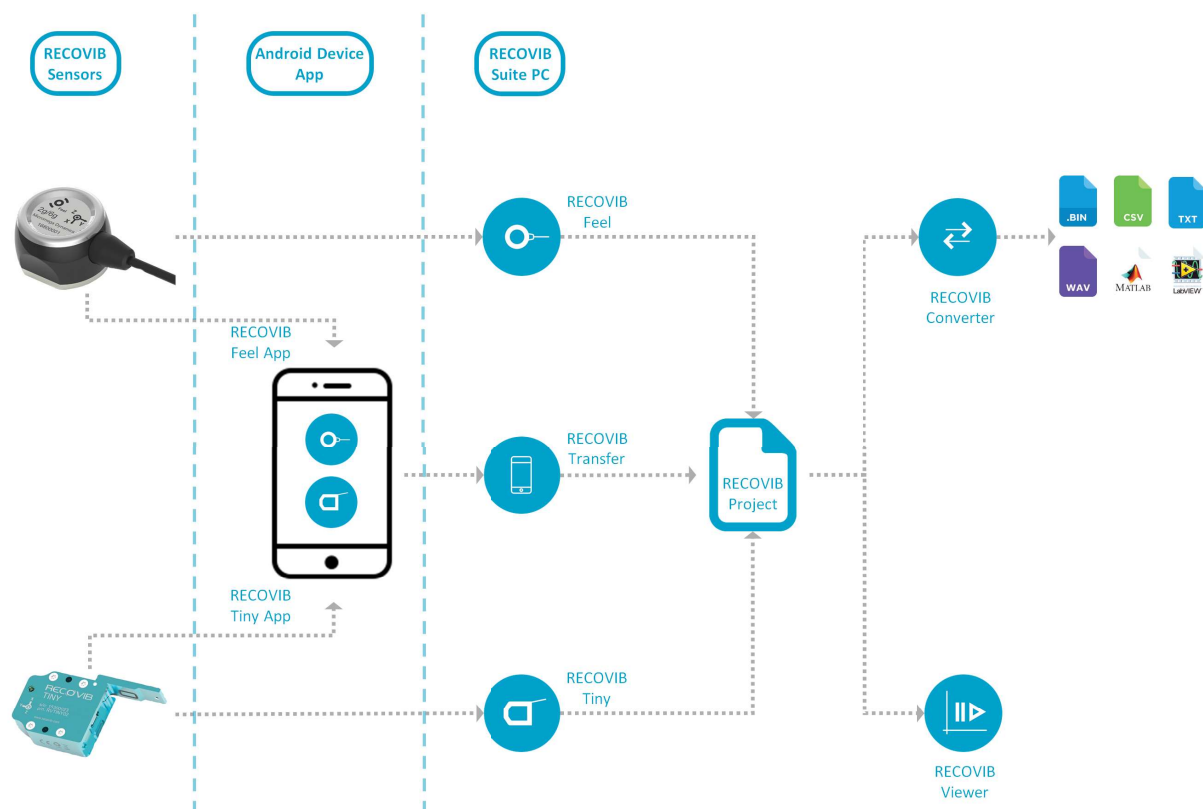
MEASUREMENT CHARACTERISTICS	Model	±2g or ±6g	±15g
	Lower frequency limit	0Hz (DC)	
	Passband frequencies (per channel)	250 Hz	
	Output unit	m/s ² - g	
	Streaming rates (per channel)	1024 samples per second	
	Non-linearity	±0,5 % F.S.	±0,3 % F.S.
	Residual noise density	30µg/√Hz	300µg/√Hz
	Residual noise (250Hz bandwidth)	475 µg	4.75 mg
	Transverse sensitivity	± 2%	
	Sensor technology	MEMS	
ENVIRONMENTAL CHARACTERISTICS	Operating temperature range	-10 .. 50°C	
	Temperature coefficient of sensitivity	±0.01 %/°C	±0.01 %/°C
	Temperature drift of zero point	±0.4 mg/°C	±1 mg/°C
	Protection grade	IP67	
MECHANICAL DATA	Dimension	46.8 x 30 x 23 mm	
	Weight	45.3 g	
	Case Material	Aluminium	
AUTONOMY	Average Power Consumption (idle)	39.15 mW	
	Average Power Consumption (streaming)	57.35 mW	
SOFTWARE	Output format	Binary	

DIMENSIONS

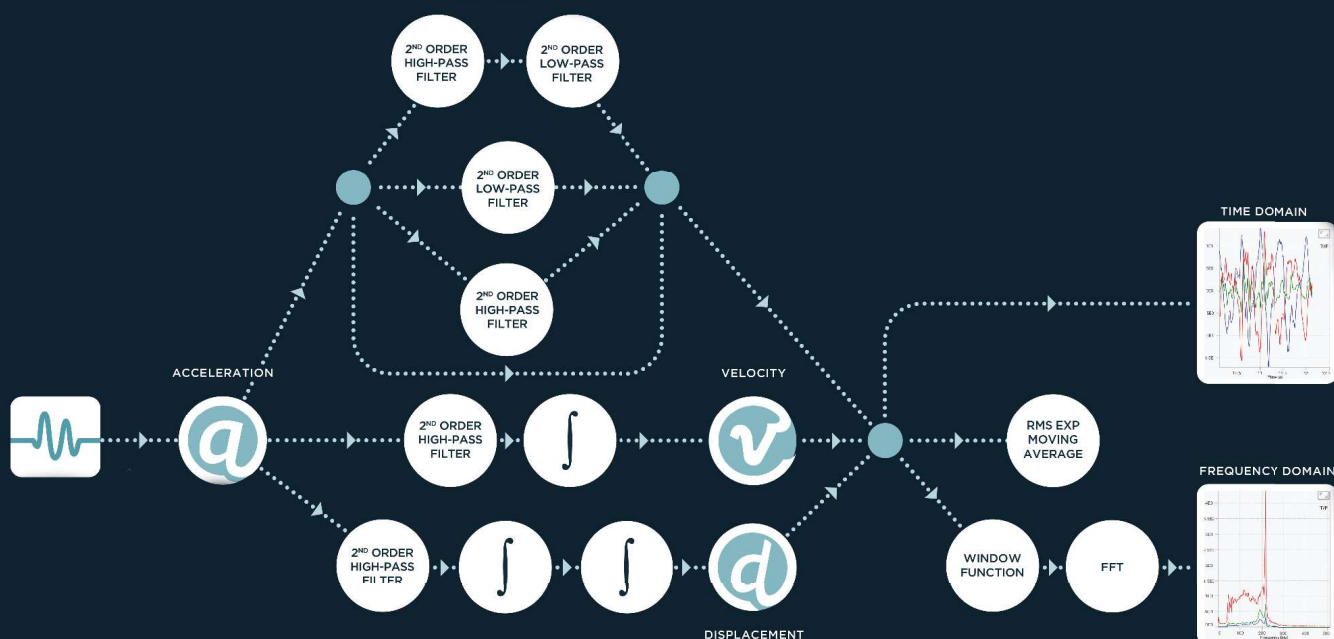


Recovib_FEEL_EN-Rev1p0

RECOVIB SUITE SOFTWARE



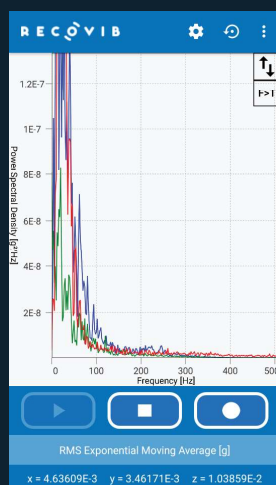
SIGNAL PROCESSING BLOCK DIAGRAM USED IN RECOVIB Feel ANDROID APP. AND RECOVIB VIEWER



RECOVIB Feel ANDROID APP.



Streaming mode



Analysis mode

RECOVIB SUITE COMPUTER SOFTWARE

Stream, Record and Analyze real-time vibration data thanks to our RECOVIB Suite SOFTWARE which includes 4 tools :



RECOVIB Feel

- Streaming real-time vibration data
- Recording real-time vibration data



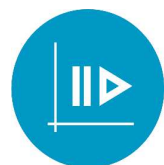
RECOVIB Transfer

- Transfer the Android RECOVIB Projects from your Android devices to your computer



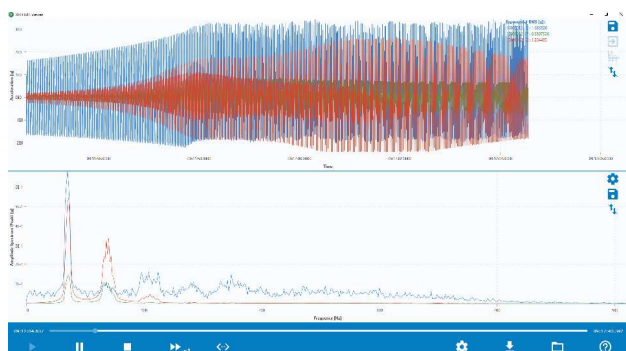
RECOVIB Converter

- Convert RECOVIB measurements into the format of your choice

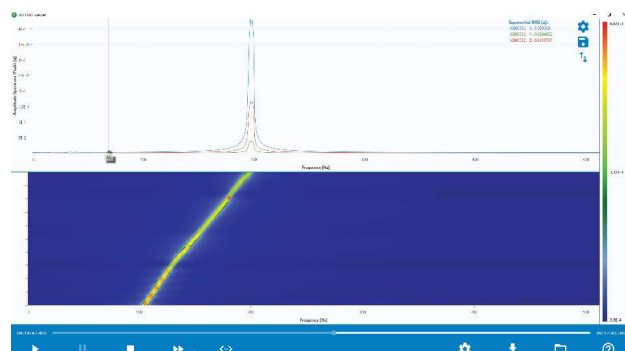


RECOVIB Viewer

- Analysis PC Software
- Replay and analyze data taken from RECOVIB Projects in the time and the frequency domain



DATA ANALYSIS



SPECTROGRAM FEATURE

Recovib_FEEL_EN-Rev1p0

REQUIREMENTS

ANDROID

MINIMUM CONFIGURATION	RECOMMENDED CONFIGURATION
Minimum SDK Version : Android 4.4 (Kitkat) – API Level 19	Target SDK Version : Android 7.0 (Nougat) – API Level 24
RAM Memory : 2GB	RAM Memory : 4GB or more
USB OTG – USB Host	USB OTG – USB Host

WINDOWS

MINIMUM CONFIGURATION	RECOMMENDED CONFIGURATION
Windows 7	Windows 10
64-bit operating system, x64-based processor	64-bit operating system, x64-based processor
RAM Memory : 2GB	RAM Memory : 4GB (8GB or more for large projects manipulation)
	DirectX10 compatible GPU

ORDER REFERENCE

SENSORS

RECOVIB-FEEL 2G/6G	3-axis logger $\pm 2g$ or $\pm 6g$ range (software selectable)
RECOVIB-FEEL 15G	3-axis logger $\pm 15g$ range (fixed)
Each logger comes with one magnet and two USB adapters. It is intended to be stored in a specially designed suitcase.	

ACCESSORIES

FEEL-SUITCASE-1	Suitcase for one RECOVIB Feel Sensor
Each suitcase includes a USB key with the software, a screwdriver, and has been designed for storing one sensor (including magnet and the two USB adapters).	

ANDROID APP.

RECOVIB Feel
Downloadable on your Android devices via Google Play Store free of charge.

COMPUTER SOFTWARE

RECOVIB Suite Computer Software
- Available free of charge and delivered inside the suitcase - Downloadable via our website - Automatic updates