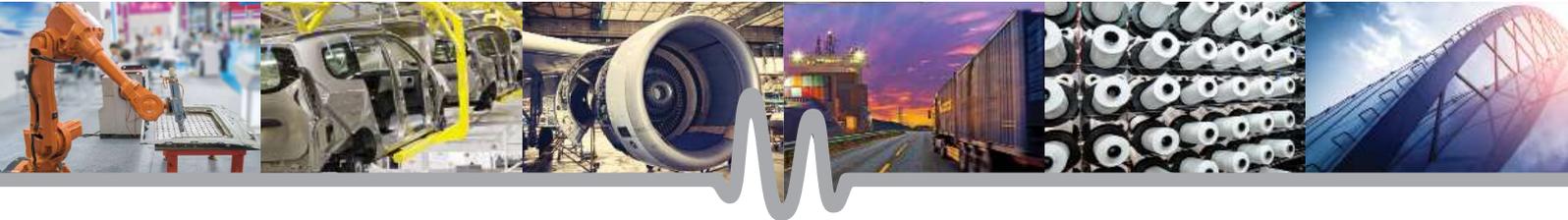
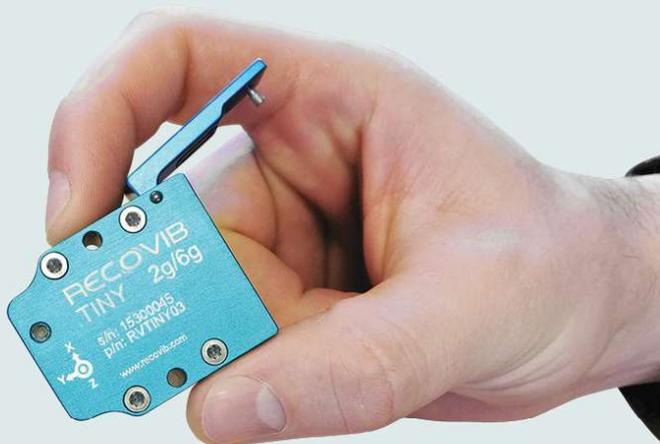


RECOVIB

TINY



3-AXIS SHOCK & VIBRATION DATA LOGGER



PROPRIETÀ

- 3 assi
- Larghezza di banda utile da DC a 250Hz
- Rumore basso
- Autonomia della batteria di 6 ore (1024 campioni/secondo)
- 2 GB di capacità di archiviazione
- Wireless durante le misurazioni delle vibrazioni
- Design compatto e robusto
- Grado di protezione IP65 - Protezione totale contro polvere e spruzzi d'acqua
- Diversi sensori possono misurare in modo sincrono e simultaneo
- Sincronizzazione a livello di millisecondi per diverse ore

POSSIBILE UTILIZZO

- Monitoraggio e diagnosi delle vibrazioni "Quick & dirty".
- Diagnostica/consulenza vibrazioni a distanza
- Misurazione delle vibrazioni su parti rotanti
- Analisi modale delle vibrazioni
- Macchine utensili - Automotive - Aviazione
- Analisi strutturale e monitoraggio sanitario
- Settore traffico e trasporti



SYNCHRONISATION



STAND ALONE



ROBUST & SOLID



PRECISE



MINIATURE

BENEFICI

Il nostro nuovo registratore di vibrazioni wireless, RECOVIB Tiny, misura le vibrazioni e gli urti su tutti e tre gli assi. È estremamente pratico per una diagnosi delle vibrazioni, offrendo fino a 6 ore di misurazione.

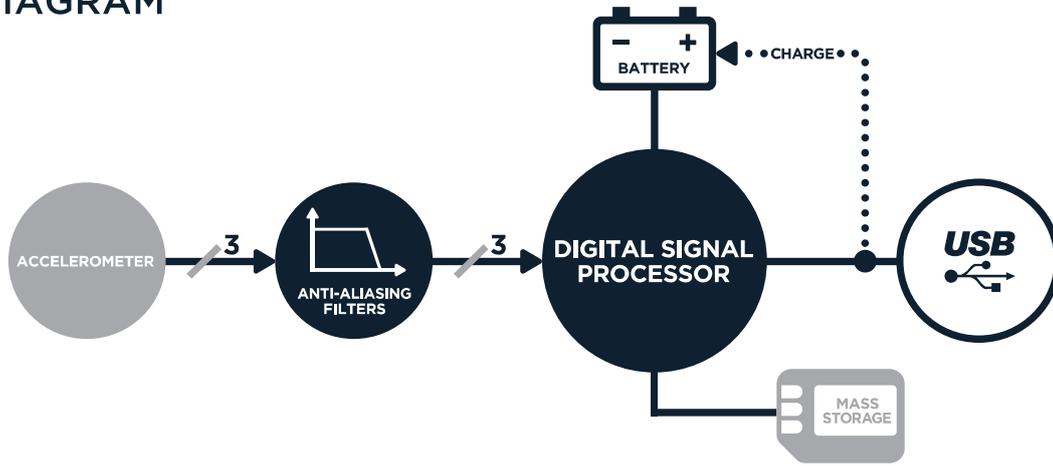
La sua tecnologia wireless e il suo funzionamento intuitivo consentono un notevole risparmio di tempo nell'esecuzione delle misurazioni.

È l'unico tipo di registratore di vibrazioni e urti che consente di utilizzare più sensori contemporaneamente in modo sincronizzato consentendo l'esecuzione di analisi modali e la forma di deflessione operativa e analisi su grandi strutture come ponti o passerelle.

Offriamo diversi campi di misura: $\pm 2/6G$, $\pm 15G$, $\pm 200 G$. È in grado di registrare 1024 valori di accelerazione (urti e vibrazioni) per canale al secondo.

Il RECOVIB Tiny è il registratore più piccolo, leggero e robusto sul mercato in grado di eseguire registrazioni in condizioni estreme che vanno da $-10^{\circ}C$ a $+50^{\circ}C$. È inoltre resistente alla polvere e all'acqua secondo IP65.

BLOCK DIAGRAM



OPERATION

To set up the RECOVIB Tiny, all you have to do is to connect the sensor to a PC or a smartphone via a USB connection. The supplied software allows for time synchronization with the PC, selection of the measuring range, as well as programming of the measurement interval.

When the sensor is disconnected from the PC or the smartphone and when the preset measurement start time is reached, the RECOVIB.Tiny begins to autonomously measure and store vibration values.

Once the preset stop time is reached, the RECOVIB.Tiny goes into sleep mode until it is reconnected to the PC or the smartphone.

The RECOVIB Tiny is therefore recognized by the PC or the smartphone as an external storage device. Thanks to the supplied software, the measurements of one or more sensors stored in a compact binary format can be converted to standard formats depending on user preference (text, CSV, MATLAB™, LabVIEW™ formats).

The Recovib Tiny is supplied with magnets for easy mounting.

When several synchronized sensors are used for a measurement, all the data are stored in one single file with one single time stamp.

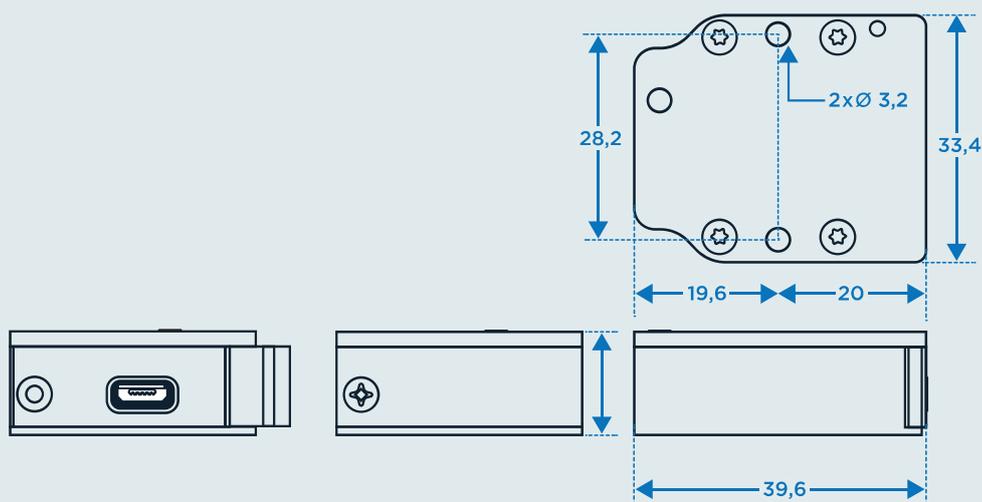
CERTIFICATIONS

	STANDARD	STANDARD REFERENCE	LIMIT LEVEL
EMC COMPLIANCE	Radiated Emission	EN 55016-2-3/CISPR 16-2-3	EN/IEC 61000-6-3 30MHZ - 1 GHZ
	Electrostatic Discharge Immunity	EN / IEC 61000-4-2	4 kV by contact 2, 4 & 8kV in air Criterion B
	Magnetic Field Immunity	EN / IEC 61000-4-8	80 A/m 50 & 60 Hz Criterion A
	Radiated, radio-frequency, electromagnetic field immunity	EN/IEC 61000-4-3	80 MHz - 1 GHz 10 V/m 1.4 - 2.0 GHz 3 V/m 2.0 - 2.7 GHz 1 V/m AM 80% 1 KHz Criterion A
DUST & WATER INGRESS PROTECTION LEVEL	Degree of Protection provided by enclosures (IP code)	IEC 60529	IP65

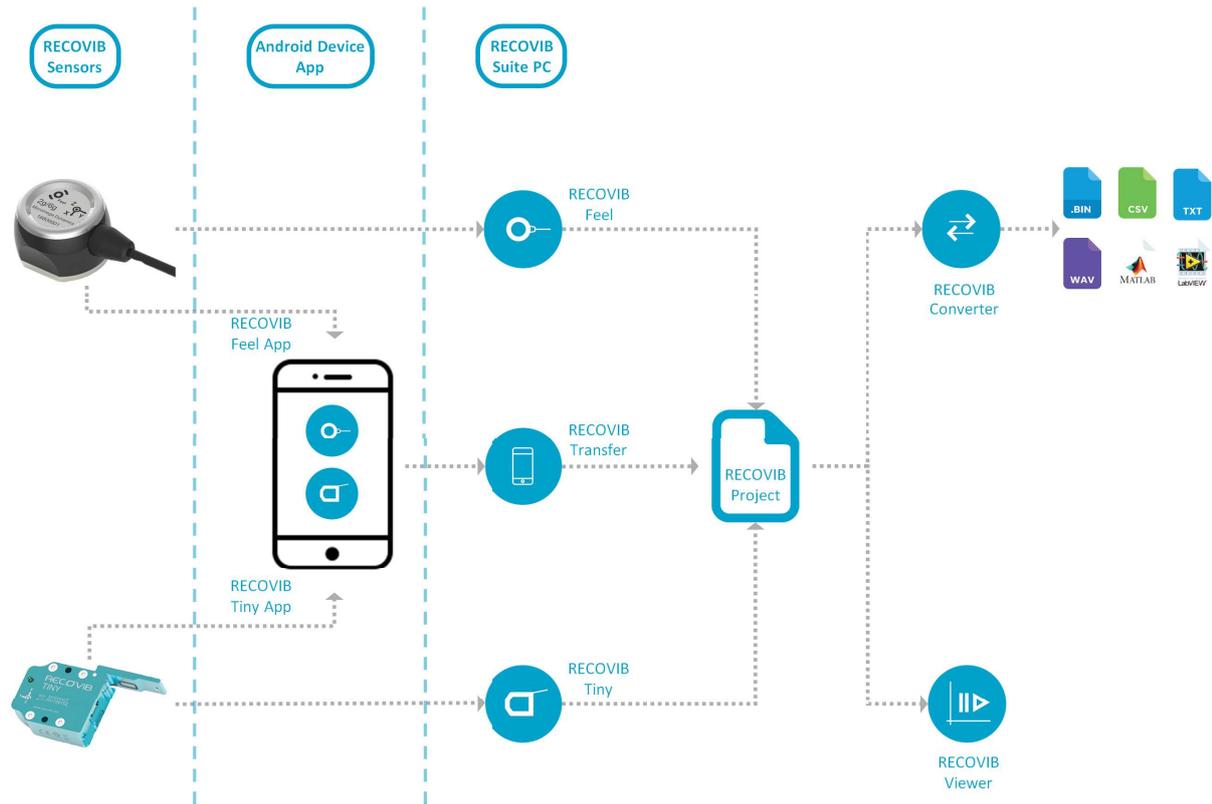
SPECIFICATIONS

	Model	$\pm 2g$ or $\pm 6g$	$\pm 15g$	$\pm 200g$
MEASUREMENT CHARACTERISTICS	Lower frequency limit	0Hz (DC)		
	Passband frequencies (per channel)	250 Hz		
	Storage rates (per channel)	1024 samples per second		
	Output unit	$m/s^2 - g$		
	Non-linearity	$\pm 0,5 \% \text{ F.S.}$	$\pm 0,3 \% \text{ F.S.}$	$\pm 0,5 \% \text{ F.S.}$
	Residual noise density	$30 \mu g/\sqrt{\text{Hz}}$	$300 \mu g/\sqrt{\text{Hz}}$	$2600 \mu g/\sqrt{\text{Hz}}$
	Residual noise (250 Hz bandwidth)	475 μg	4,75 mg	47 mg
	Transverse sensitivity	$\pm 2 \%$	$\pm 2 \%$	$\pm 2 \%$
	Sensor technology	MEMS		
AUTONOMY	Battery	6 hours		
	Storage	2GB		
OUTPUTS FORMATS	Binary, txt, CSV, NI LabVIEW, MATLAB (Level 5 MAT-file)			
ENVIRONMENTAL CHARACTERISTICS	Operating Temperature range	$-10 \dots 50^\circ\text{C}$		
	Temperature coefficient of sensitivity	$\pm 0,01 \%/\text{C}$	$\pm 0,01 \%/\text{C}$	$\pm 0,02 \%/\text{C}$
	Temperature drift of zero point	$\pm 0,4 \text{ mg}/\text{C}$	$\pm 1 \text{ mg}/\text{C}$	$\pm 30 \text{ mg}/\text{C}$
	Protection grade	IP65		
MECHANICAL DATA	Weight	33.5gr		
	Case Material	Aluminum		

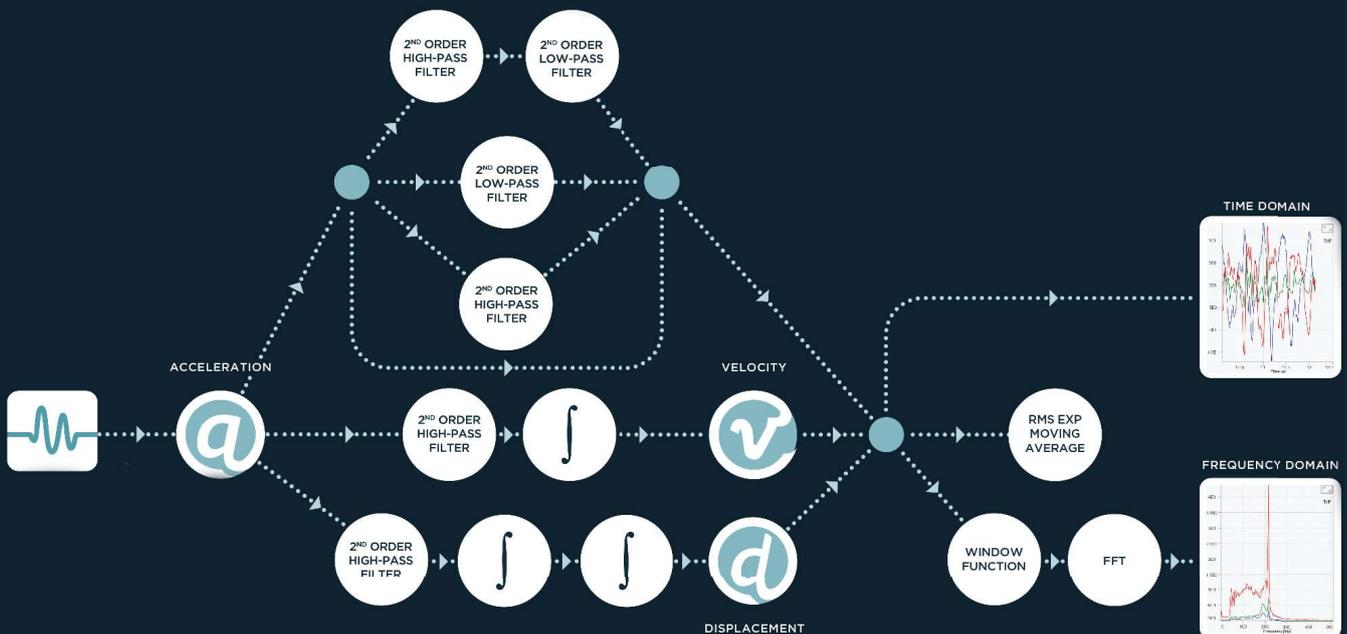
DIMENSIONS



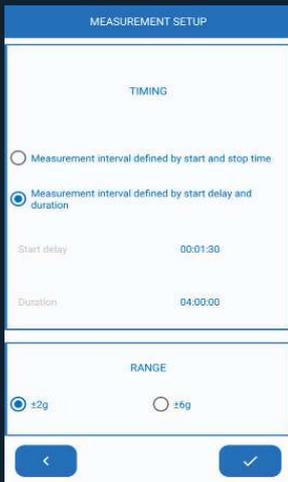
RECOVIB SUITE SOFTWARE



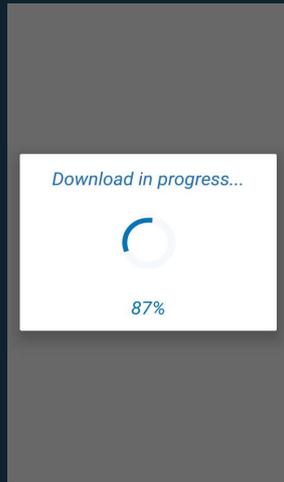
SIGNAL PROCESSING BLOCK DIAGRAM USED IN RECOVIB Tiny ANDROID APP. AND RECOVIB VIEWER



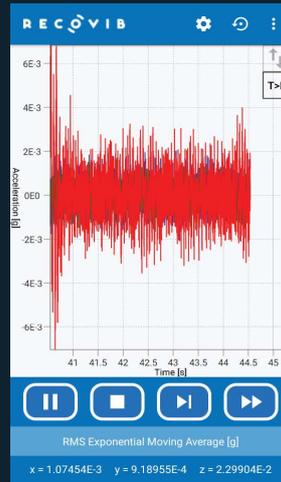
RECOVIB TINY ANDROID APP.



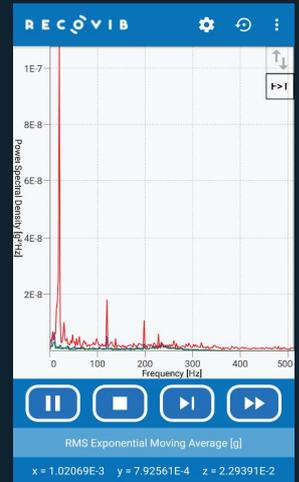
SENSORS SETUP



DATA DOWNLOAD



ANALYSIS MODE



RECOVIB SUITE COMPUTER SOFTWARE

Program your sensors, export and analyze your data thanks to our RECOVIB Suite SOFTWARE which includes 4 tools :



RECOVIB Tiny

- Multi-Sensors setup
- Download device measurements



RECOVIB Transfer

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



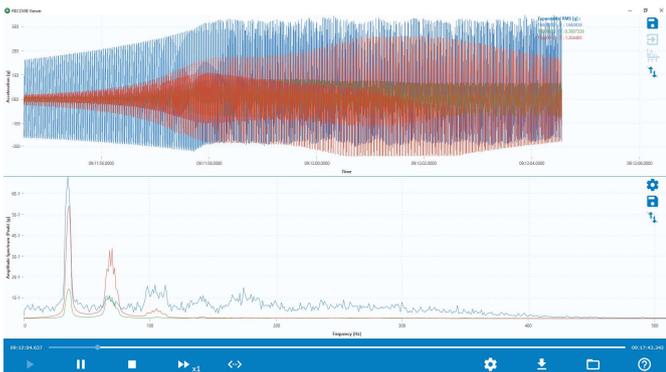
RECOVIB Converter

- Convert RECOVIB measurements into the format of your choice

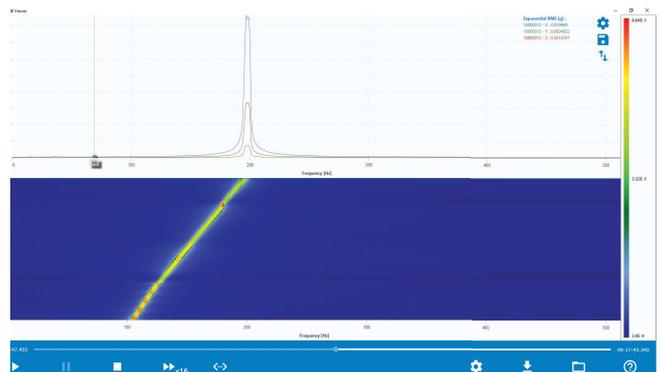


RECOVIB Viewer

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



DATA ANALYSIS



SPECTROGRAM FEATURE

Recovib_TINY_EN-rev1p4

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-TINY 2G/6G	3-axis logger $\pm 2g$ or $\pm 6g$ range (software selectable)
RECOVIB-TINY 15G	3-axis logger $\pm 15g$ range (fixed)
RECOVIB-TINY 200G	3-axis logger $\pm 200g$ range (fixed)

Each logger comes with 2 pot magnets and a USB cable. It is intended to be stored in a specially designed suitcase.

ACCESSORIES

TINY-SUITCASE-1-EU	Suitcase for one RECOVIB-TINY Sensor
TINY-SUITCASE-1-UK	
TINY-SUITCASE-1-US	

Each suitcase includes a USB key with the software, a flat key, a screwdriver, a charger and has been designed for storing one data logger (including pot magnets and a USB cable).

TINY-SUITCASE-5-EU	Suitcase for two to five RECOVIB-TINY Sensors
TINY-SUITCASE-5-UK	
TINY-SUITCASE-5-US	

Each suitcase includes a USB key with the software, a flat key, a screwdriver, a charger (simultaneous charging of up to 5 sensors) and has been designed to store up to 5 data loggers (including pot magnets and a USB cable).

ANDROID APP.

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

COMPUTER SOFTWARE

RECOVIB Suite Computer Software
<ul style="list-style-type: none">• Available free of charge and delivered inside the suitcase• Downloadable via our website• Automatic updates