

## COMPARATIVE: DR4 innRecords vs 9x30 Saver

Comparative Table



Specification	innRecord DR4-03R	innRecord DR4-04E	SAVER™ 9X30
Primary accelerometer	Piezoresistive Triaxial ±100g	Piezoelectric Triaxial ±100g	Piezoelectric Triaxial ±200g
Secondary accelerometer	Capacitive ±40g	Capacitive ±40g	Not included
Sampling frequency	20000 Hz (primary), 4000 Hz (secondary)	20000 Hz (primary), 4000 Hz (secondary)	Up to 10000 Hz
Frequency response	From 0 Hz (real DC)	From 0 Hz (real DC)	From 0.4 Hz
Internal memory	16 GB	8 GB	128 MB
Internal battery	4000 mAh, up to 7 days continuous, >2 years with triggering. Additional external battery/power supply possible.	250 mAh, up to 12 h, up to 49 days with triggering. Additional battery/external power supply possible.	(External batteries NOT rechargeable) 9V, up to 90 days (lithium), 45 days (alkaline), up to 180 days with external pack
Dimensions	99.8 x 58.6 x 45.6 mm	76.2 x 29.8 x 15 mm	127 x 124 x 43 mm
Weight	250 g	40 g	1 kg
Environmental protection	IP50	IP50	IP code not specified
Additional sensors	Temperature, Humidity, Light, Pressure, GPS, Magnetometer, Gyroscope, Microphone	Temperature, Humidity, Light, Pressure, Magnetometer, Gyroscope	Temperature, Humidity, Pressure
Operating temperature range	-40°C to 80°C	-10°C to 80°C	-40°C to 60°C (lithium) / -20°C to 54°C (alkaline)
Humidity range	0-95% RH non-condensing	0-95% RH non-condensing	5%-95% RH non-condensing
Pressure range	20-110 kPa	20-110 kPa	10-1100 mbar
Shock limit	>3000g	>3000g	>3000g
Noise floor	<0.04 gRMS	<0.04 gRMS	0.02 gRMS @ 500 Hz
Measurement accuracy	±0.003 g	±0.003 g	±5% (Depending on full scale)
Communication interface	USB-C	USB-Micro	USB 1.1/2.0 to Special connector
Data export	CSV, MatLab, .SLTT (for innSoft Analyze)	CSV, MatLab, .SLTT (for innSoft Analyze)	CSV, Excel, PDF
Software	innSoft Analyze	innSoft Analyze	SaverXware
Data export - Software	CSV, Excel, PDF	CSV, Excel, PDF	ASCII
Reports included - Software	Vibrations, Pitch & Roll, GPS, Climatic Analyzer (Temperature, Humidity, Pressure)	Vibration, Pitch & Roll, Climatic Analyzer (Temperature, Humidity, Pressure)	Acceleration, Temperature, Humidity, Pressure
Chassis material	Aluminum 7075	Polycarbonate - ABS	6061-T6 anodized aluminum
Optional accessories	Waterproof case, AlwaysOn Powerbank	Waterproof case, AlwaysOn Powerbank	SAVER™ 9XGPS

### DR4 innRecords:

- They have 2 dedicated accelerometers, which gives greater versatility and accuracy when measuring different signals. For example, impacts and vibrations simultaneously.
- Ability to measure a smaller range of accelerations. This range, however, has been carefully selected based on the needs to record during transportation and to improve the accuracy of the recording.
- High memory capacity that allows for more types and longer recordings (GBs).

### 9x30 Saver:

- It has only one accelerometer. This can be limiting when configuring and recording different acceleration signals such as shock and vibration.
- Ability to measure a wider range of accelerations
- Very low memory capacity (MBs).
- Its batteries are non-rechargeable batteries that need to be replaced continuously. They are difficult to obtain and must be purchased at destination or shipped each time.

### DR4 innRecords:

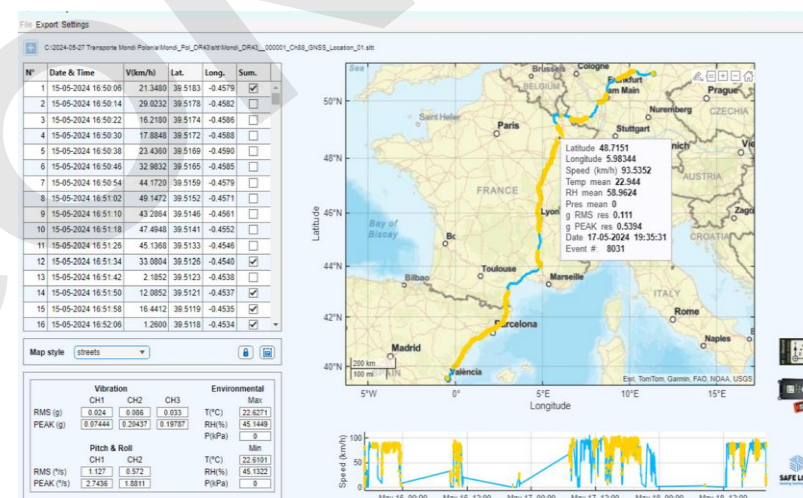
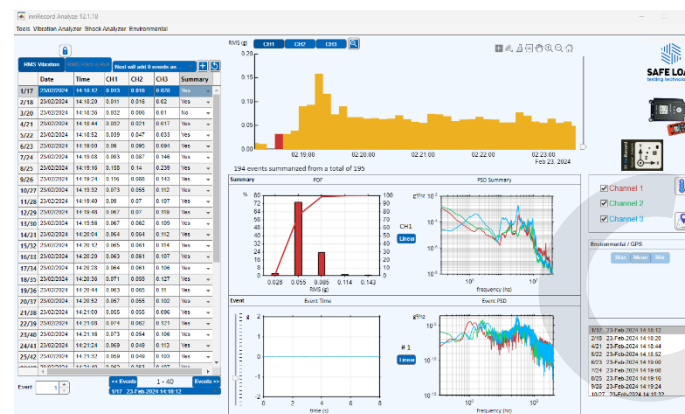
- It has a built-in rechargeable battery. It can be connected directly via USB to be recharged or be connected to a continuous power supply. In addition, the USB can be used to download the recorded data.
- The small size and light weight, and the inclusion of all sensors in the same device facilitates the installation and the number of scenarios where it can be mounted.

### 9x30 Saver:

- The large size and the need for extra structures or external sensors for some measurements can make the device difficult to handle and install or even make it unfeasible to install.
- Big size and less in-built sensors. The need for extra structures or external sensors for some measurements can make the device difficult to handle and install. For example, for angular measurements, several external sensors (triaxial accelerometers) and a special mounting are required, which takes up a lot of space in transport and the measurements obtained are not as accurate, especially at low frequencies.
- Weight may affect the accuracy of measurements taken depending on where it is placed.

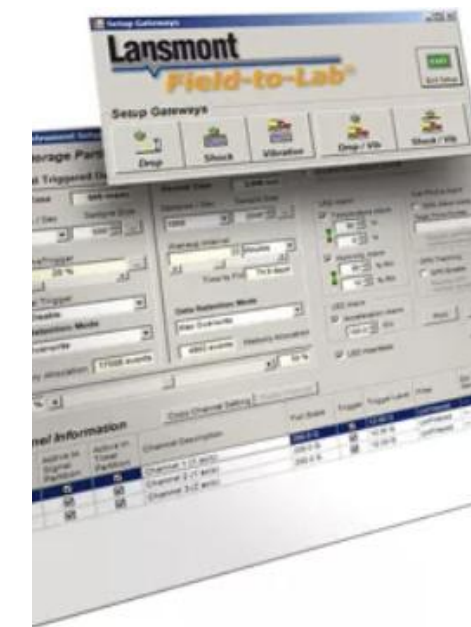
## DR4 innRecords:

- Can be connected with a normal USB cable, for example from a mobile phone, which can be found anywhere.
- innSoft Analyze, analysis software that is continuously being updated, user friendly, simple to use for novice users with pre-configurations and advanced with great customization capacity for people with a lot of knowledge, high analysis capacity and a great number of possible elements to be analyzed.



## 9x30 Saver:

- The input connection of the device requires a specific uncommon connector. This implies that if you do not have the original cable, you cannot access the recorded information.
- SaverXware software: old, not very user friendly, and very difficult to analyze and use. Requires high knowledge just to be able to use it.





# innRecord Recording and Analysis Overview



Configure the data recorder



Fix & Record



Export data from data logger



Data Analysis Software  
innSoft Analyze