

# Lode Research Data Logger

Multiple sensors in a wearable device



## Highlights

### Water resistance

The sensor is water resistant (IP68)

### Flexibility in sample frequency

For all the type of sensors different sample frequencies can be chosen

### Battery life

Battery life is around the 24 hours with all sensors on maximum sample frequency

### Raw data

The export file contains raw data from all the sensors

### Multiple sensors

The data logger contains several sensors which can be set individually



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The Lode Research Data Logger allows for a multitude of datalogging options. The 4Gb data storage can be allocated to various data streams that can be set within the special included application. Datastreams can be set up to max 1000 Hz for ECG and other relevant high frequencies for the other sensors:

- 2-lead ECG
- XYZ acceleration up to 4g
- Magnetoscope data
- Gyroscope data
- Environmental light conditions
- User action event logging

The device is IP 68 waterproof when used with a cover cap.

Application areas are numerous. One can think of various sports logging applications, e.g in extreme (wet) circumstances, movement analysis etc.

The software allows for data upload in .csv format to your PC.

## Features



### Modern OS compatibility

- Windows 7
- Microsoft Windows 8
- Microsoft Windows 10



### USB connectivity

USB to connect to PC facilitates easy connectivity.



### CSV file

Export file is a CSV file which easily can be used in:

- excel
- matlab
- python



### Field measurements

The wireless sensor, together with the battery life and data storage capacity makes it possible to measure easily in the field

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Lode Research Data Logger can a.o be extended with the following options:

## USB charge cable

Easy charging



Partnumber: 950792

## ECG Streamer - docking station

Charging batteries simultaneously



Partnumber: 950820

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## Specifications

### Accuracy

Data storage capacity	4 Gb
Maximum sample frequency ECG	1000 Hz
Resolution ECG sensor	16 bit
CMRR ECG sensor	>100
Maximum sample frequency accelerometer	250 Hz
Resolution accelerometer	12 bit
DC accuracy accelerometer	0.02
Measurement range accelerometer	±4 g
Maximum sample frequency gyroscope	250 Hz
Resolution gyroscope	16 bit
Measurement range gyroscope	±2000 °/s
Maximum sample frequency magnetometer	50 Hz
Resolution magnetometer	16 bit
Measurement range magnetometer	±4800 µT
Maximum sample frequency light sensor	10 Hz
Resolution light sensor	16 bit
Measurement range light sensor	0.01-100k lumen
Maximum sample frequency event button	10 Hz

### Connectivity

LDEM	✓
USB connector	✓

### Dimensions

Product height (mm)	25 mm	
Product length (mm)	94 mm	
Product width (mm)	36 mm	
Product weight	0.04 kg	0.1 lbs

### Power requirements

Autonomy	1440 min
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### Compatibility

Waterresistant	IP68
Microsoft Windows 10	✓
Microsoft Windows 8	✓
Microsoft Windows 7	✓

### Included parts

PC software included	✓
All cables included	✓

### Order info

Partnumber: 950931

*\*Specifications are subject to change without notice.*