buttonsens®

Quantifying fingertip forces

Soft fingertip force sensor

buttonsens® enables the quantitative analysis of **finger forces** and **dexterity**.

The textile sensor can be utilized to **measure forces** when pushing a **button** or at any other finger-object interaction.

buttonsens® key features:

➢ quickly measure the force with an easy to use sensor

➢ visualize and analyze data in realtime via a mobile app

➢ quantify forces to design best practices and work standards for processes

➢ analyze mechanical properties of button or switches for ergonomic optimization

➢ enable precise work flow standards by creating thresholds and using auditory or visual feedback

Accuracy (% at ZAS): +/-5

Sampling rate:
Up to 100 Hz

Battery life:
up to 48 hours

Conformable
and flexible
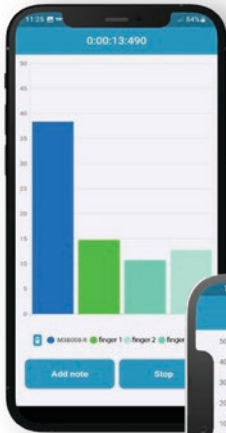
Force range:
0.1 N - 175 N

loadapp® technical specifications

Connect up to 6 electronic units

Synchronize measurement with video

Export data as ASCII and share instantly

Visualize data as time series and get
visual or audio feedback in realtime

GET IT ON
Google Play

Download on the
App Store

buttonsens® applications

buttonsens® is the leading technology for mobile force evaluation in many fields in which the load on the hand is to be monitored in daily routine. Some example applications include:

Rehabilitation: grasping, writing	Ergonomics in industrial applications
Sports: Archery, cycling, tennis, golf	Training & education in manual therapy and medicine
Industry: Automotive, robotics, exoskeletons	And many more …

buttonsens® sensors

Technical data	buttonsens
number of sensors	1-3
dimensions (mm)	17 x 17 Standard and custom
sampling rate (Hz)	10-100
transmission	Bluetooth® LE
operating devices	iOS or Android mobile devices
power supply	3V coin cells

buttonsens® glove

The buttonsens® glove is a highly accurate and reliable solution for load measurements on the entire hand. The system consists of a palm sensor and up to 12 finger sensors, which can be combined as desired.

novel

emed®
Accurate & reliable foot analysis

emed® enables the analysis of the barefoot at highest quality level.

Easily scan the **pressure distribution** and get a reliable and accurate **analysis of the foot function.**

loadpad®
Force evaluation on deformable surfaces

loadpad® enables the effortless measurement of forces on contact areas and interfaces.

Utilize the mobile, wireless and versatile sensors to **analyze contact forces** between objects accurately and reliably.

loadsol®
Truly wireless load measurement

loadsol® enables truly wireless in-shoe force measurement **now** in **any environment** and with **any movement**.

Capture the interaction between foot and ground **accurately, effortlessly,** and with **flexibility**.

pedar®
Leading system for in-shoe measurement

pedar® enables the analysis of the **interaction between the foot and the shoe** at highest quality and precision levels.

Use the system for **in-shoe pedography** and collect reliable pressure and load distribution data.

pliance®
Accurate surface pressure analysis

pliance® enables the measurement of force and **pressure** distribution between **3D-deformed interfaces.**

Utilize pliance to analyse pressure on **seats, saddles, mattresses** and any other soft or hard object.

texsens®
Unobtrusive low pressure sensing

texsens® enables the analysis of local pressures between soft interfaces (e.g. between skin & textiles).

Use texsens to precisely quantify pressure and **optimize your wearable products** or **garmets.**