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.

Surface-compliant pressure sensors

pliance® key features:

- measure surface pressure with thin, elastic, highly compliant matrix sensors
- optimize ergonomics of your product by analyzing the pressure distribution
- identify pressure peaks caused by your product to adapt your design
- monitor movement and dynamic pressure changes in realtime
- synchronize any motion capture system

Technical information

Synchronize with lab equipment:
Via TTL pulses

Max number of sensors:
2048 (2 x 32 x 32)

Scanning rate:
20.000 sensors/ seconds

Accuracy: ± 5% ZAS *

Connect via:
Bluetooth or USB

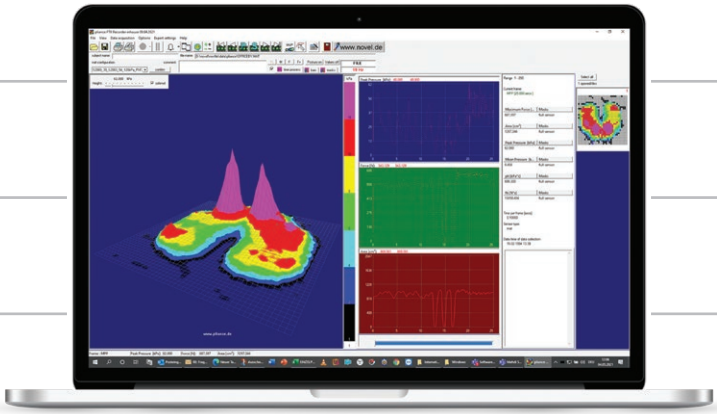
Data storage
2 GB SD card

pliance® software features

Loaded area over time

Loaded area over time

Loaded area over time



Full access to raw data

Loaded area over time

Loaded area over time

Get it on Windows 11

novel GmbH (Global, GER)
Ismaninger Str. 51, 81675 Munich
tel: +49 (89) 417767-0
e-mail: sales@novel.de
web: www.novel.de

novel electronics inc. (North America)
964 Grand Avenue St. Paul, MN 55105
tel: +1 (651) 221-0505
e-mail: novelinc@novelusa.com
web: www.novelusa.com

pliance sensors and applications

pliance offers over 1000 different sensors for even more applications. The system can be used for medical applications, research and development applications, robotics, industry, etc.

Some common examples of sensors are:

Application	Sensortype	Specifications
textile industry, medicine, etc. e.g. garment assessment e.g. development of wearable products	single sensors	- enhanced flexibility, - high friction cover, - integrated fixation mechanism, - low pressure optimized - reduced influence on measurement
R&D, automotive, biomechanics e.g. soft surface pressure evaluation e.g. pressure analysis for process evaluation	regular scale sensors, multi-purpose sensors	- rectangular shape, - increased robustness or precision - 16 x 16 or 32 x 32 Sensor resolution,
ergonomics, medicine, etc. e.g. bed mattress optimization e.g. car seat development e.g. office chair design	large scale sensors, bed sensors, seat sensors	- covers large areas up to 200 x 100 cm, - up to 64 x 32 sensor resolution
R&D, medicine, etc. e.g. robotics control e.g. prosthesis optimization e.g. increase added value of product	embeddable sensors	- decreased thickness and - optimized robustness
R&D, medicine, etc. e.g. helmet optimization e.g. chemical process evaluation e.g. neurological analysis during precission tasks	custom sensors	- customized shape and

Other novel systems

buttonsens®

Quantifying fingertip forces

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

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

loadpad®

Unobtrusive low pressure sensing

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**.

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.**

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.

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.**

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