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loadpad®

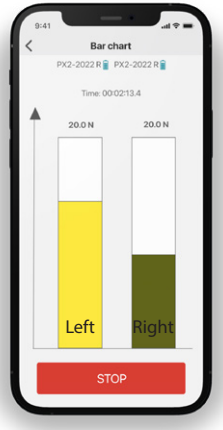
Force evaluation on deformable surfaces

loadpad® enables the measurement of forces on contact areas between deformable objects.

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

Mobile, conformable force sensors

- **loadpad® key features:**
- measure forces between deformable objects with reliable and precise capacitive force sensors
- analyze interaction between objects in realtime in various environments
- utilize the loadapp smartphone app to visualize the data and to get realtime feedback
- customize the measurement by setting force thresholds, pre-defined procedures, and boundary conditions



Technical information

Conformability:
Flexible and stretchable

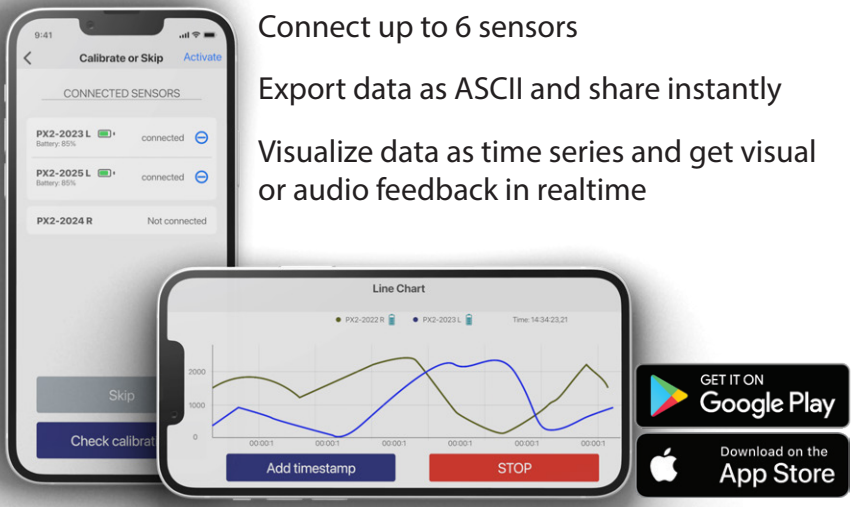
Sampling rate:
Up to 200 Hz

Force range:
0.1 N - 25 kN*

Battery life:
up to 60 hours

Accuracy (% ZAS): 5

loadapp technical specifications



Connect up to 6 sensors

Export data as ASCII and share instantly

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

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loadpad applications

loadpad is the leading technology for mobile force evaluation in many fields. Some example applications include:

Rehabilitation: forces on crutches	Automotive: load protection	Manufacturing: optimization
Sports: weight lifting symmetry	Manual therapy: training	Medicine: fracture evaluation
Ergonomics: force during pull	Industry: IoT	Vet. medicine: horseback riding

loadpad sensors

We offer 2 different loadpad models, in various sizes, depending on your needs. The **loadpad** and the **loadpad HT**.

loadpad: measure forces between one soft and one hard object (e.g. measurement between foot and ground);

loadpad HT: measure forces between two soft objects (e.g. measurement between practitioner's hand and patient).

Technical data	loadpad	loadpad HT
Resolution in N	from 0.5 N	from 0.1 N
Size in cm	1 x 1 cm - 40 x 20 cm	2.5 x 3.5 cm - 15 x 10 cm
Thickness in mm	3.3 mm	1.9 mm
Maximum force in kN	up to 25 kN*	up to 6 kN*
Cover material	leather	customizable

*dependent on contact area

Other novel systems

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manugraphy®
Accurate & reliable hand analysis

manugraphy® enables the analysis of the hand function at highest quality level.

Scan the **pressure distribution** to get a reliable and accurate **analysis of the hand function.**

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.**

texsens®
Unobtrusive low pressure sensing

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

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

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.

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