Physiotherapists

Wearable technology helping physiotherapists to track and analyze movements in real life conditions

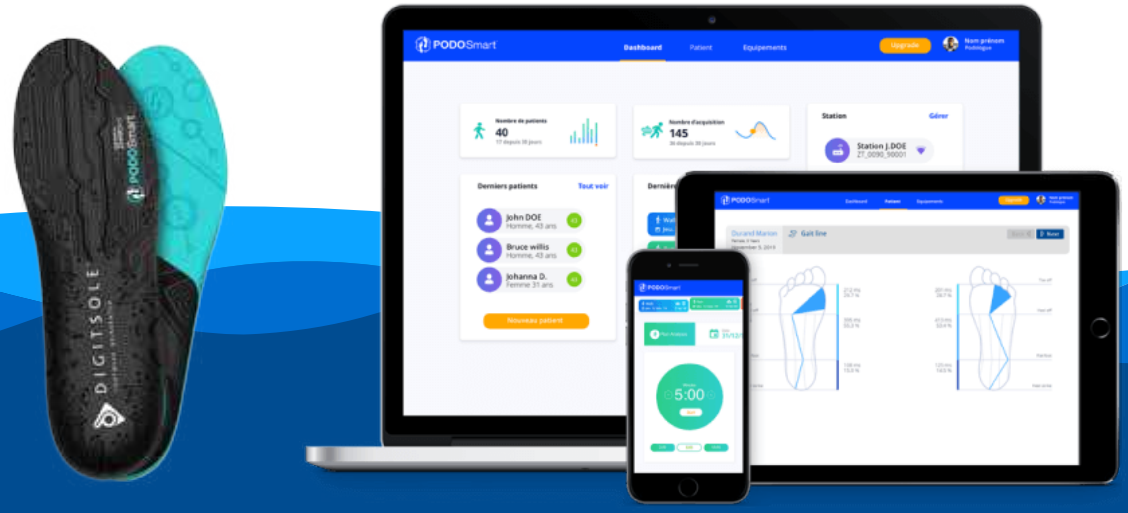
www.podosmart.tech

PODOSmart®

Our innovative technology allows to better understand patient movement.

PodoSmart® is an innovative solution to quantify the movement of patients with different mobility disorders such as neurological, orthopaedic, related to age, or sports.

This objective assessment allows to improve patient management, and thus to implement a better treatment, plan more appropriate rehabilitation programs and follow the progress of patients over time.



How it works?

4 simple steps to make dynamic motion analysis

The practitioner puts the insoles in the patient's shoes and starts walking or running.

The data from the insoles come into our PodoStation via Bluetooth.

The complex algorithms are translated into useful clinical data to measure changes and effectiveness of the treatment.

PodoSmart® delivers a diagnosis and some exercises based on the patient's biomechanical patterns and the practitioner's

Fields of application

By capturing data on both feet at every step, either at the clinic, lab or outside, Podosmart® provides a detailed view of dynamic gait parameters.

In a clinical setting, gait analysis is an important factor that podiatrists use to evaluate movement. Physiotherapists have to perform a visual assessment devices and use shoeless to observe the patients' movement and diagnose gait dysfunctions related to musculoskeletal limitations, abnormalities in the patient's gait pattern or if the patient is compensating for an injury, which is not a reflection of the patient's natural gait.

Healthcare

Thanks to PodoSmart® hundreds physiotherapists obtain an accurate and quantitative analysis of patients' biomechanical markers to detect mobility disorders.

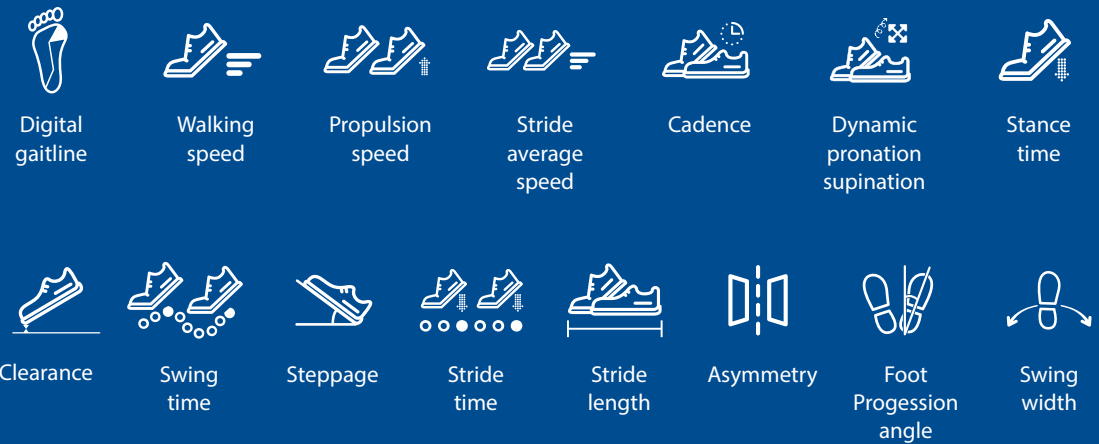
Sport

With our technology you can enhance athletes' performance, minimize the risk of injury and defind the best rehabilitation treatment.

Research

Dozens of scientific publications and clinical tests show a direct link between mobility disorder and neurological diseases like Parkinson.

Some of our meaningful parameters



Technical specifications

Insoles specifications

Sizes	Dimensions (cm)	Weight(g)
36-37	24.1 x 8.4	66
38-39	25.4 x 8.7	70
40-41	26.7 x 9.0	73
42-43	28.1 x 9.3	78
44-45	29.4 x 9.6	84
46-47	30.7 x 9.9	90

Battery :	Lithium-ion
Nominal voltage :	3.6V
Charging voltage :	70 mA
Life cycle :	+/- 500 loads
Full charging time :	2h30
Active mode autonomy :	33h
Full sleep autonomy :	2000h
Connectivity :	USB
Cleaning :	Wipe

Package information

Weight :	3.02 kg
Dimensions :	44 x 38 x 17.5 cm
Bluetooth :	BLE 4.0
USB cables :	4 cables with double micro usb connectors
Wifi :	802.11a/b/g/n/ac

A unique combination of inertial plateform and artificial intelligence

Each Podosmart® insole has an inertial plateform that records the movements and orientations of the foot in space. This data is processed by our artificial intelligence algorithms to recognize the walking steps, running strides or other activities, and then calculate the spatio-temporal, kinematic and biomarker parameters that will be displayed in our interface.

Compatibility

CE CERTIFIED FCC CERTIFIED R 214-10 5146 IC CERTIFIED GDPR COMPLIANT

Examples of practical cases in physiotherapy

The stride of a patient at 3 months post-stroke

The analysis of gait allows the impact of rehabilitation on potential residual lameness to be objectively quantified. The stride length, contact and take off times, clearance, angle of attack or lateral deviation from oscillation provide indicators of the quality of the single-podal loading of the paretic limb, the propulsion and the passage of the step. Thus it will be possible to study the progress of the patient on these different biomechanical parameters and to accompany the rehabilitation with exercises dedicated to the improvement of these deficits.

Limping when a patient who has undergone total knee replacement surgery resumes walking in the secondary post-operative phase.

The purpose of the analysis will be to initially assess the quality of walking and to provide key elements for monitoring progress in rehabilitation. Thus the therapist will be able to objectively assess the patient, allowing him/her to evaluate his/her own BDK and to communicate with the surgeon or the attending physician.
Particular attention will be paid to the symmetry and to the values of cycle length, contact and flight time, but also to the lateral deviation at oscillation and step clearance, thus providing an important indicator of the kinematics of the two lower limbs.

Persistent lameness for an ankle sprain grade 2 to d+28

Gait analysis will have the advantage of focusing on the kinematics of the ankle. PodoSmart will be able to evaluate parameters such as contact and flight times, propulsion speed, angle of attack of the step, or pronation-supination angles of the foot at different moments of the unipodal support.
These parameters allow the objective quantification of lameness and deficits visible to the eye by the therapist. The improvements made by the sessions can then be measured by the practitioner and communicated to the patient in order to evaluate the progress made.

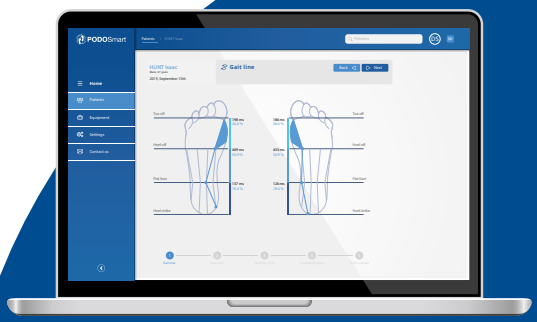
New

A free demo mode

Export in .pdf file

We have developed a new free demo mode allowing you to explore the PodoSmart® interface without having to own the connected insoles kit. An opportunity to have a comprehensive view of the web interface and the results of analyses carried out through pre-recorded walking and running activities.

PodoSmart® standard version



AI based software
in the cloud

Set of 6 pairs of connected insoles
+ Bluetooth station

+

Walking analysis

- ✓ Dynamic gait analysis
- ✓ Comparative analysis & evolution
- ✓ Foot kinematics
- ✓ Fractal Analysis

included

Running analysis

- ✓ Speed / Cadence
- ✓ Flight / Contact time
- ✓ Strike pattern
- ✓ Pronation / Supination

included

2 000 € HT*

Optional software add-ons

Available in November 2020

Orthotics recommendation
AI algorithms including a tool to assist in the design of corrections

Kids - gait analysis
Understanding and intervention on growth-related abnormalities highlighted by gait analysis.

Physical test evaluation
To assess and monitor the patient's capabilities

Elderly - gait analysis
Analysis of disorders related to aging and risk of falling

PodoSmart®, an international presence

600
clinics
in less than 6 months

20
Countries

40
Employees

References

National and Kapodistrian University of Athens · ICM · irr · Inria

" Affordable, very easy to use, adapted to most of our patients, it allows an analysis beyond the walls of our practices. "

Cyril Marchou, Podiatrist - France

" We increased our fee for biomechanical assessment from £90 to £150. We have also seen an 83% increase in the number of biomechanical assessments booked "

Gill Newhouse, Podiatrist - UK

" Podosmart allows me to have a dynamic quality study. The software is very intuitive and easy to use. With PodoSmart, I can better explain the treatment plan I propose to my patients. "

Fabrice Millet, Podiatrist - France

100% FREE - NO CREDIT CARD REQUIRED

Try it now !

Discover the PodoSmart® web interface for free and access 5 examples of pre-recorded quantified walking and running assessments.

www.podosmart.tech

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