

# Tactilus® Mattress Body Mapping Sensor System

## What is Tactilus Body Mapping?

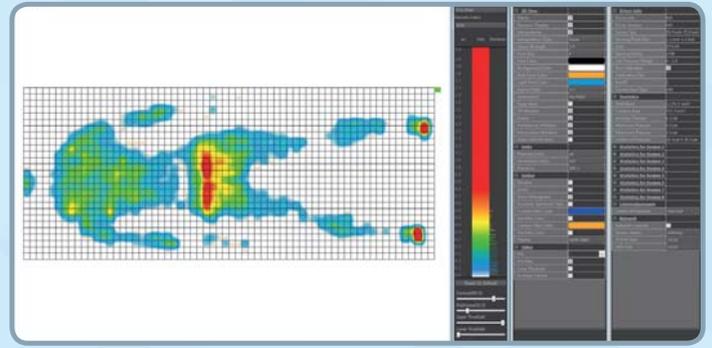
The Tactilus Body Mapping Mattress Pad is designed to measure pressure distribution and magnitude between the body and a mattress or any other contacting surface. Pressure is a key consideration for any product that requires prolonged body contact. Our Tactilus system is the most economical, scientific and user-friendly system for surface pressure mapping available today.



Up to 1,728 sensing points show real time pressure data

## How it is used

- ▶ Research & Development
- ▶ Product design optimization
- ▶ Comfort level testing
- ▶ Competitive benchmarking
- ▶ Retail Applications



Tactilus software screen shot

## Key benefits

- ▶ Evaluate the comfort and design of mattresses with full body pressure mapping
- ▶ Perform comparative testing between different mattress surface materials
- ▶ Record measurements across the entire body simultaneously
- ▶ Visualize in real-time scenarios with body shifting into different positions
- ▶ Use scientific data to validate comfort assumptions
- ▶ Use data in marketing material to communicate product benefits
- ▶ Stretchable and conforming fabric that adapts to all body types

## Patented Stretch Sensors

The heart of our system technology is a sensor that is stretchable and breathable

Tactilus uses our Smart Fabric that is a patented, four-way stretch material. Our Smart Fabric allows the patient to more fully immerse into the mattress and reduce the “hammocking effect” that can be experienced with more rigid materials.



- ▶ **Layer 1:** Alternating knit conductive and non-conductive columns
- ▶ **Layer 2:** Pressure-sensitive fabric, varies resistance with force
- ▶ **Layer 3:** Alternating knit conductive and non-conductive rows

# Tactilus Technology

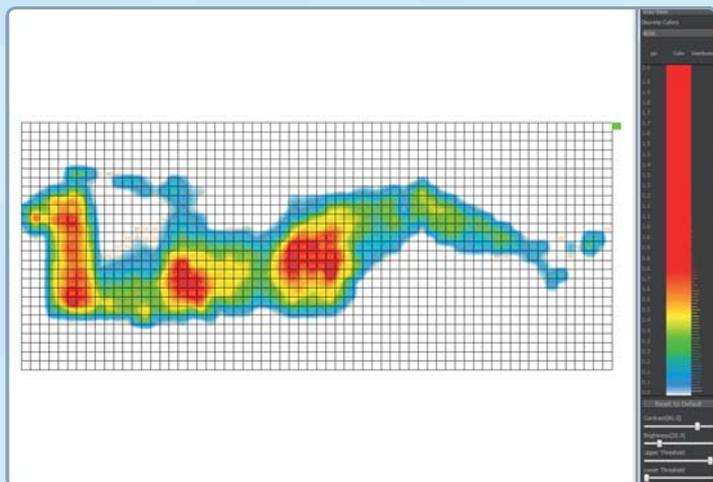
Tactilus is matrix based tactile surface sensor that works by the principle of piezoresistance. Tiny sensing cells cover the entire surface area of our sensor "skin" allowing for discrete spot pressure analysis at any point in the contact region.

Tactilus captures data from a series of sensor points propagated across the body surface and assimilates the data into our software providing you with colorized pressure maps and detailed statistical reports.

Sensor Products primary proposition is to offer our clients precisely what they require or need. To that end, everything we design can be completely tailored to your unique situation.

## Key Tactilus Features

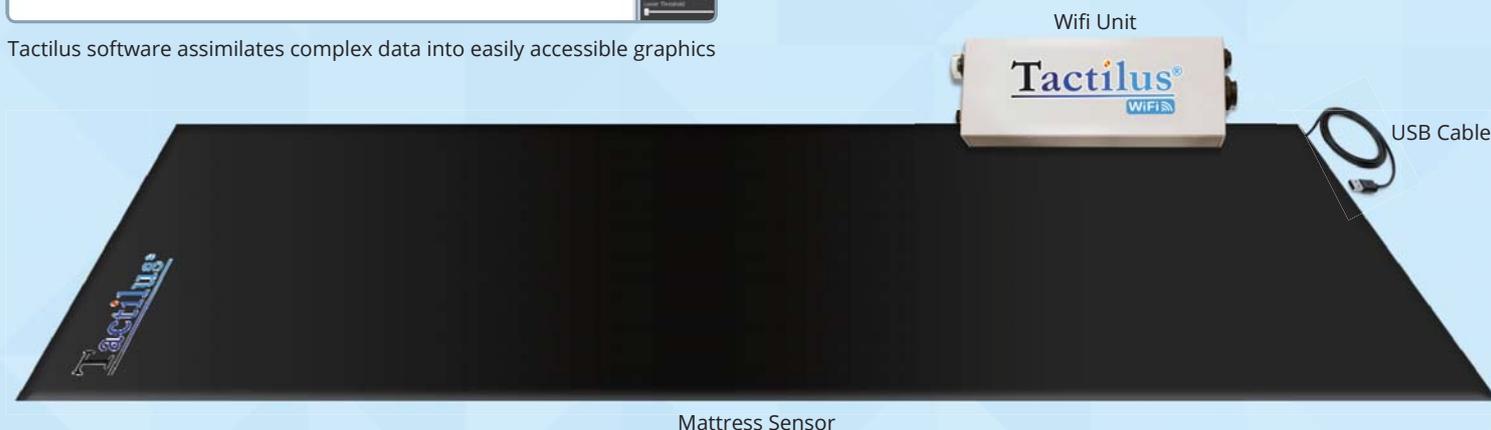
- ▶ Highly conformable and stretchable.
- ▶ True calibration. NIST traceable.
- ▶ No cumbersome external electronics. They're safely built into the sensor.
- ▶ No training required. Hit the ground running.
- ▶ Durability like no other sensor.



Tactilus software assimilates complex data into easily accessible graphics

## Sensor Specifications

Technology	Piezoresistive
Pressure Range	0 - 2 PSI (0 - 0.14 kg/cm <sup>2</sup> )
Grid Size	64 x 27
Sensing Points	Up to 1,728
Sensing Point Size	1" x 1" (25.4 mm x 25.4 mm)
Total Area	76.6" x 34" (1950 mm x 863 mm)
Total Sensing Area	73" x 30" (1854 mm x 762 mm)
Scan Speed	USB 50 hertz (WIFI 10 hertz)
Temperature	10° C - 40° C
Thickness	.098 in. (2.5 mm)
Accuracy	± 10%
Transmission Range	66' (20 meters) WIFI
Transmission Mode	USB cable or WIFI



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