THE SEATING MAT DEV KIT 1.8

The Smartest Seating Solutions

PRODUCT & DATA SHEET

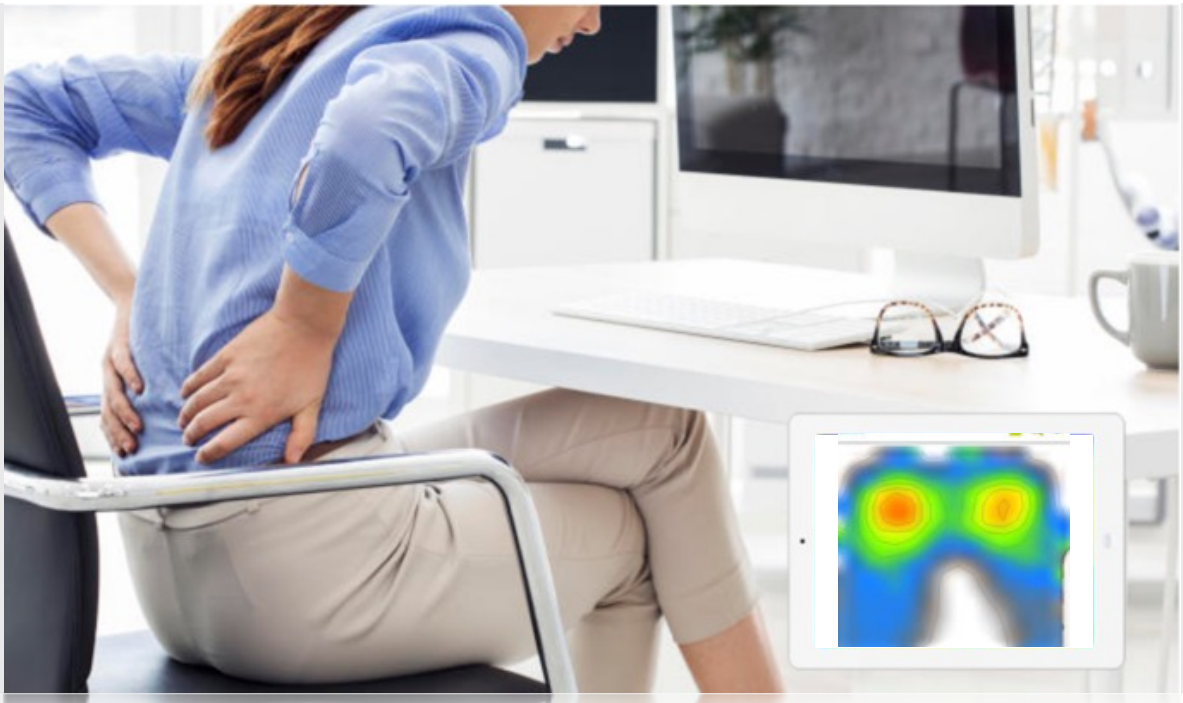
1- The Seating Mat Platform

The Seating Mat, based on the Sensing Mat Platform by Sensing Tex, is developed to take advantage of the collected pressure mapping on the surfaces we sit on, and is a modular system for Seating Trackers. The pressure sensor mat allows the detection of non-uniform pressures, alignment, center of balance, body movement, etc.

The Seating Mat Platform is an end-to-end solution to design smart connected products to collect data, recognize patterns and trigger actions based on the stretchable printed electronic technology patented by Sensing Tex.

The Seating Mat allows for a big number of other sub-applications mainly in healthcare, wellness, sports and many more.

2- The Seating Mat Dev Kit



The Seating Mat dev kit is an OEM White Label hardware system for product developers. It is designed to be placed on top or below a surface in a way that is not noticeable for the user: a completely non-intrusive solution.

The Seating Sensor is performed by a textile matrix sensor that gathers the pressure maps of users when seating or pressing on it. This data is then treated by our software analytics to obtain useful information such as pressure hotspots, the posture center of balance and pressure distribution.

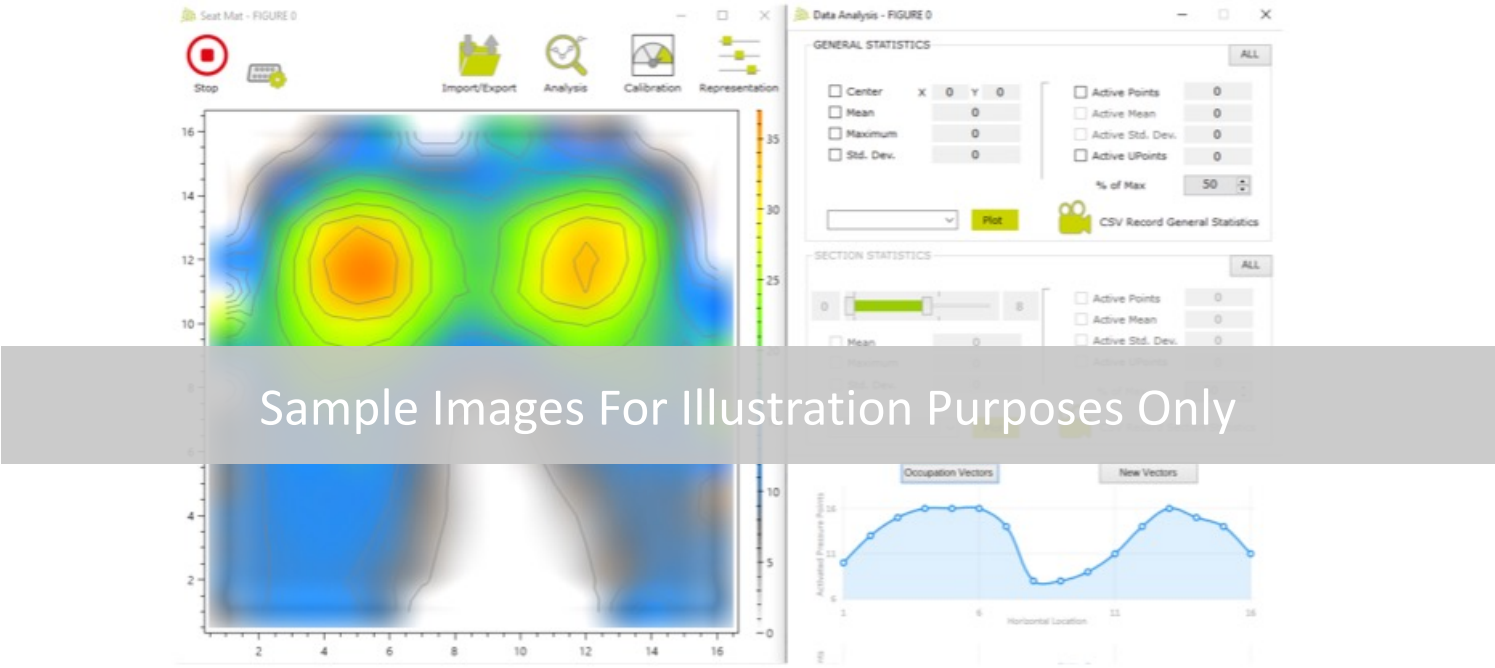
This relevant information is then displayed in the Software provided; the user can use the insight to take the most appropriate decisions to enable or improve their wellness and health products. The system may be integrated with any other software.

Get in touch with our team for more info: info@sensingtex.com

3- The Hardware

1- Mat
2- Cables, Electronic module & Straps
3- Protective Foam
4- Transportation Bag
5- Mat Cover W/ Straps

4- The Demo Software



Sensing Mat Features	
Overall Area (L x W) [mm]	510 x 480
Sensing Area (L x W) [mm]	320 x 320
Number of Sensor Elements	256
Matrix Topology [R x C]	16 x 16
Sensor Element Resolution [mm]	20
Sensor Element Shape	Round
Sensor Element Size [mm]	10
Cover	Yes, Cushions & Chairs Adapted
Pressure Sensing Features	
Linearity Coefficient	0.99
Accuracy	10%
Pressure Range	20-1000 mmHg
Hardware Features	
ADC Resolution	12 bits
Scanning frequency [Hz]	5*
OS & Platforms Compatibility	Windows, Linux, IoT, Android
Standard Connectivity Hardware	BT 2.0 Class II and USB Serial
Standard Connectivity Enabled	USB Serial (24/7) & BT 2.0 Class II
Connector Power	Textile micro-USB
Built in Battery	Yes (420mAh)
Software Features	
Demo Software	Windows
Software Support	Software Developer Guide Provided & Technical Assistance

**We Have Limited The Frequency To 5Hz. Higher Frequency Can Be Set Up Upon Firmware Changes Requests*

Sensing·Tex

SENSING TEX, SL | info@sensingtex.com

Sensing Tex, SL. Sensing Tex® Registered. 2021 All rights reserved. Confidential and proprietary document.
This document and all information contained herein is the sole property of Sensing Tex, SL. No intellectual property rights are granted by the delivery of this document or the disclosure of its content. This document shall not be reproduced or disclosed to third party without the express written consent of Sensing Tex, SL. This document and its content shall not be used for any purpose other than that for which it is supplied.