

## Overview

The Infi-Tex Sampler is a kit demonstrator that enables you to experience how our force sensitive e-textile functions and feels. Various sensing configurations and arrays demonstrate standard operational modes of our proprietary pressure sensitive ink that can be used in analogue as well as digital modes. As a result, more complex human-machine interaction is possible. The solution is reliable, flexible, drapable and washable.

## Key Features

The sampler contains 5 different sensor regions:

- **Force Pad:** The sensors report the X-Y position and Z-plane force level recorded
- **Multi-touch:** The sensors can distinguish between multiple forces exerted simultaneously enabling gestures and multiple inputs methods
- **NumPad:** Demonstration of binary input functions as numbers
- **Slider:** Analogue input to control any number of variables such as volume, brightness, scroll up or down
- **Switch:** Activation can be set at a specified force threshold (preventing false touch) and used to toggle between on/off states

## The Technology

Infi-tex's screen-printed inks are made from a set of proprietary nanoparticles and polymers. Once printed, the resulting circuits exhibit pronounced pressure-sensitive electrical properties that enable tactile, intuitive gestures with dynamic analogue inputs. The sensing material responds to an applied mechanical pressure by changing its electrical resistance in proportion to the pressure and the resistance change can be read using the associated electrodes.

## Basic Specifications

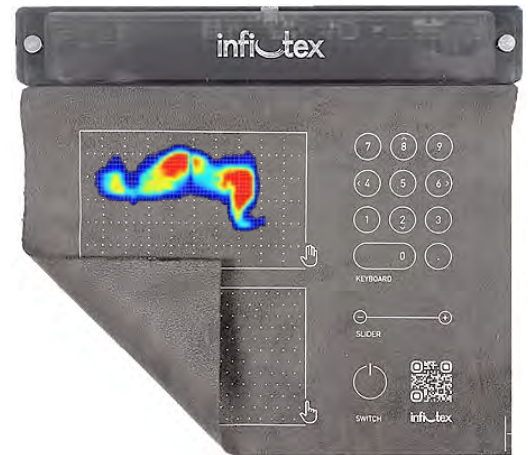
<b>Mat Sensing Area</b>	367mm x 255mm
<b>Spatial Resolution</b>	Customisable and limited by the print resolution line width ~ 100um
<b>Power</b>	2mA at 5V
<b>Typical Pressure Range</b>	20-2000g/cm <sup>2</sup>
<b>Sensitivity</b>	20g/cm <sup>2</sup>
<b>Time Resolution</b>	0.25ms

## Quick-start guide



## Scope of Delivery

- The Sampler
- USB A – Micro USB B
- Link to cloud-based software



## Benefits

- Low power
- Highly flexible
- Customisable design
- Durable
- Washable

## Applications

- Wearables
- Health-Tech
- Fit-Tech
- Automotive (interior)
- E-textiles

