



## Pressure Profile Sensing - FingerTPS

### Description

The FingerTPS sensor is an integrated system based around sensors specifically designed and moulded for use on the finger tips and palm of the hand. This allows the user to measure loads and pressures when used in a wide range of applications including ergonomics, medical, consumer product design and robotics.



*FingerTPS System*

Product designers, for example, can use the FingerTPS sensors to measure finger or grasp forces in activities like squeezing and opening bottles, or operating hand tools and machinery. Medical practitioners use the system to study chiropractic and massage therapy techniques, as well as finger / hand pressure applied during surgical procedures.

The collected data can then be used to analyse and improve techniques and / or designs for their applications. Conformable arrays can then also be applied to products or tools under test to accurately sense pressure variations to aid human interaction design.



*Gloved Hand During Massage Procedure*

### Key Features

- Load range = 0 - 20 N
- Sensitivity < 1 %
- Scan rate = 40 Hz
- Soft, comfortable sensors, thickness = 2 mm
- Bluetooth wireless interface, 10 m range
- Video camera and display
- Calibration loadcell
- Sensor options