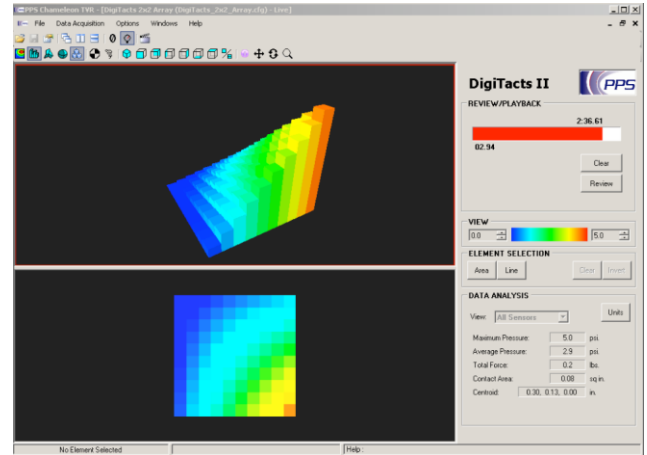




DigiTacts System



Sample Data Display

PRODUCT OVERVIEW

The **DigiTacts System** features high performance embedded tactile sensors from PPS for giving the “sense of touch” to products in the fields of medical devices, robotics, automotive and consumer electronics.

PPS offers the **DigiTacts Systems** primarily as development kits intended for developers who wish to incorporate DigiTacts sensors into the design of their product.

Digitacts Systems include Digitacts sensors that feature embedded digital output that is ideal for OEM integration. These sensors comprise of multiple sensing pads, each typically with 12-24 sensing elements, which can be placed on any location of choosing in the sensor active area.

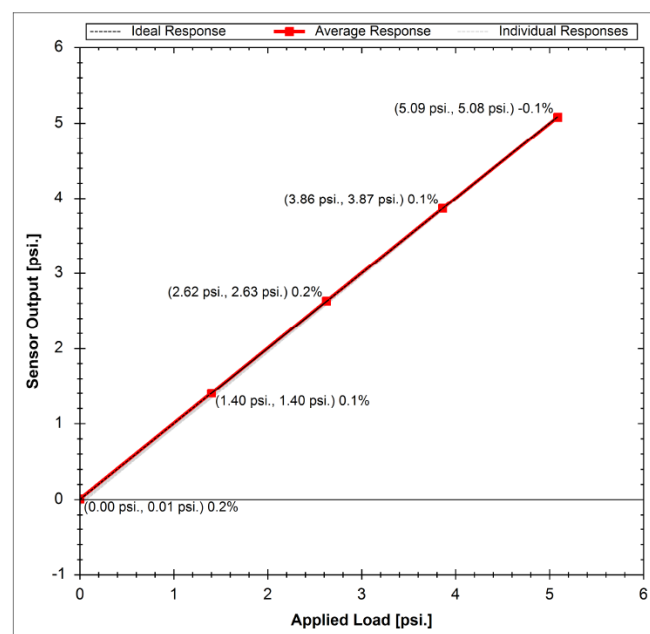
Data from sensors is transferred via I²C or SPI digital interfaces, enabling product designers and engineers to easily integrate Digitacts sensors into their products.

KEY SYSTEM FEATURES AND BENEFITS

- **Sensitive tactile sensors with stable and repeatable sensor output** that can be used virtually any geometry, so testing is not constrained by surface design.
- **Capable of measuring low to high pressures** to support a broad range of applications.
- **Compact wireless Bluetooth electronics** provides easy to use set up with minimal wires.
- **SPI or I²C serial digital output** ideal for OEM integration.
- **High performance capacitive sensing technology** that saves time and improves results by significantly reducing recalibration and repeated tests allowing developers to resolve problems and answer questions faster.
- **Chameleon Visualization Software** provides intuitive, easy to use, high-quality visualization and easy access to data for analysis and export to other applications.

SENSOR CHARACTERISTICS AND PERFORMANCE ¹²	
Pressure Range	5, 20 or 40
Pressure Sensitivity	0.2%
Signal to Noise Ratio (SNR)	700:1
Repeatability Error	0.5%
Linearity	99.7%
Accuracy Error ³	<=2%
Contact Surface Material	Cloth & Polyimide
Sensor Thickness	0.02 in (0.5 mm)
Cable Length	59 in (1.5m)
Operating Temperature	-20°C to 100°C

ELECTRONICS SPECIFICATIONS	
Sample Rate	30-100Hz
Computer Interface	Bluetooth
ADC Resolution	16 bit
Input Voltage	5V
Input Power	2.5W
Enclosure Size	3×1.5×0.5 in. (75×40×12.8 cm)
Weight	0.12 lbs. (55 g)



SYSTEM COMPONENTS

- DigiTacts sensor of chosen design (includes one additional spare sensor)
- Rechargeable D710 electronics interface module with Bluetooth connectivity
- Chameleon Visualization and Data Acquisition Software
- Remote Installation and Training
- Optional: PPS to provide a system that operate two sensors simultaneously with two additional spare sensors

¹ Performance numbers are for typical system response. Actual performance may vary.

² There are 13 DigiTacts sensor designs that are offered as part of PPS product catalog.

³ Measured using PPS standard calibration and test equipment – includes repeatability errors, noise and linearity.