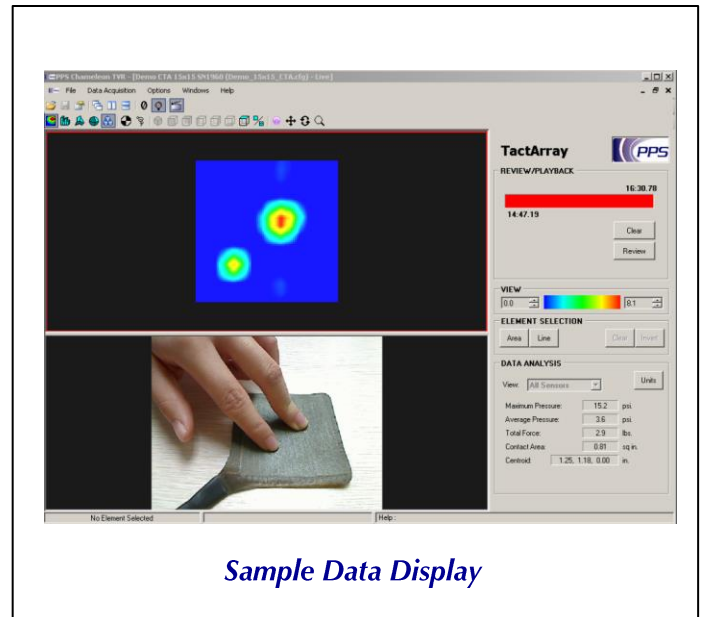




Conformable TactArray System



Sample Data Display

PRODUCT OVERVIEW

TactArray Systems capture pressure distribution between two objects in direct physical contact. By placing TactArray sensors between objects, wrapping them around shapes, or applying them to a flat surface, product developers and researchers can measure and visualize pressure information in their applications.

PPS's **Conformable TactArray Systems** comprise of conformable sensors that are constructed from soft and flexible conductive cloth. These sensors offer the key advantage of providing relatively high sensor performance in a flexible package that is moldable to multi-curved surfaces.

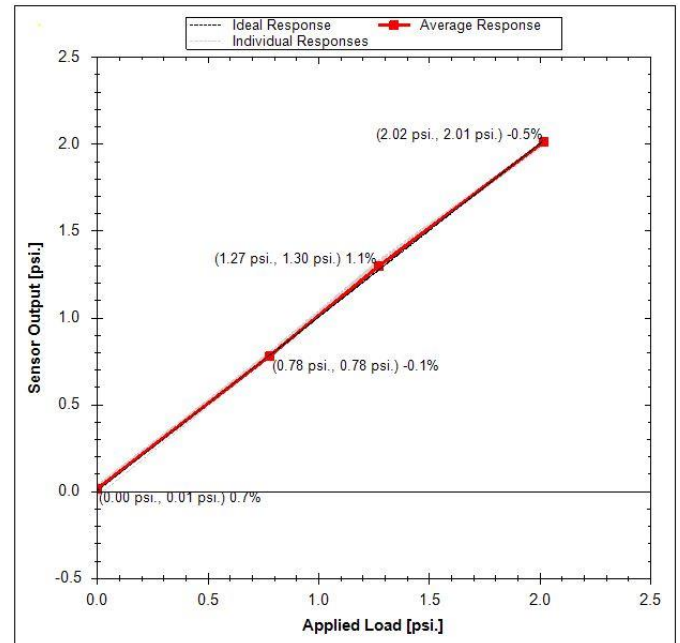
In particular, **Conformable TactArray** sensors can wrap around simple geometries or be molded to more complex shapes without compromising data quality.

In addition, **Conformable TactArray** sensors are also highly sensitive and capable of resolving to pressures as low as 10 Pascal.

KEY SYSTEM FEATURES AND BENEFITS

- **High resolution highly sensitive and repeatable array sensors** that allow designers to develop the best product designs based on highly reliable, high resolution data.
- **Sensors are accurate and repeatable** even for complex head shapes so users can quantify comfort and fit for optimized product design.
- **Sensors that can capture extremely low pressures** to support applications where pressures are typically very small and even as low as 10 Pascal.
- **High performance capacitive sensing** technology 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	3, 20 or 75 PSI
Pressure Sensitivity	0.15%
Signal to Noise Ratio (SNR)	500:1
Repeatability Error	0.35%
Linearity	99.8%
Accuracy Error ³	<=2%
Contact Surface Material	Conductive Cloth
Sensor Thickness	0.04 in (1 mm)
Cable Length	59 in (1.5m)
Operating Temperature	-20°C to 100°C



ELECTRONICS SPECIFICATIONS	
Sample Rate	7-10 KHz element to element
Computer Interface	USB 2.0
ADC Resolution	12 bit
Input Voltage	5V
Input Power	2W
Enclosure Size	6.5×6.2×1 in. (16.5×15.8×2.5 cm)
Weight	1.43 lbs. (650 g)

SYSTEM COMPONENTS

- One Conformable TactArray Sensor of chosen design
- T4500 signal conditioning electronics with USB 2.0
- Chameleon Visualization and Data Acquisition Software
- Synchronized video capture function and hardware
- Remote Installation and Training

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

² There are multiple conformable 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.