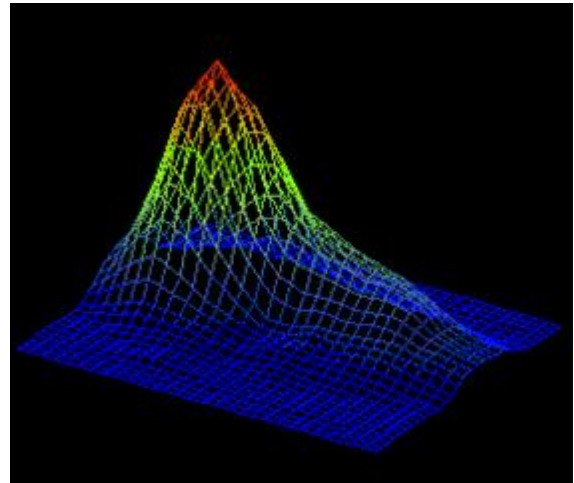




Hybrid TactArray System



Sample Display Data from Hybrid TactArray

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 **Hybrid TactArray Systems** combine the best of both material worlds. Designed for use in low-to-moderate pressure ranges, **Hybrid TactArray** sensors leverage the benefits of both cloth and Polyimide.

Hybrid TactArray sensors consist of a flexible or rigid Polyimide circuit board base with a cloth upper electrode and are best suited for use either in very complex designs or in designs that require the sensor to be integrated into a product.

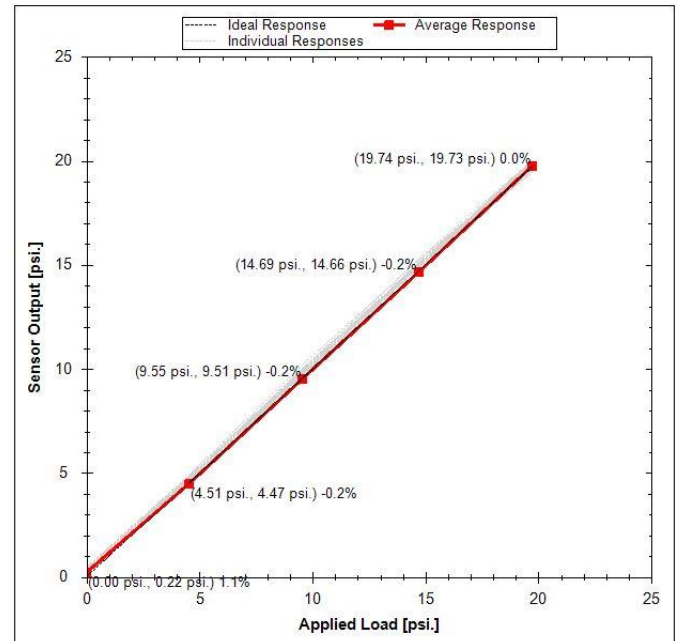
KEY SYSTEM FEATURES AND BENEFITS

- **Highly sensitive, flexible-material sensors** with stable and repeatable sensor output that can be used even on curved surfaces without compromising data quality.
- **Sensors combine both cloth and Polyimide material worlds** making them ideal for use in low-to-moderate pressure ranges and in either very complex designs or in designs that require the sensor to be integrated into a product.
- **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 PERFORMANCE¹²

Pressure Range	3, 20 or 100 PSI
Pressure Sensitivity	0.2%
Signal to Noise Ratio (SNR)	700:1
Repeatability Error	0.5%
Linearity	99.8%
Accuracy Error ³	<=2%
Contact Surface Material	Polyimide and Cloth
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	7-10Khz element to element
Computer Interface	USB 2.0
ADC Resolution	12 bit
Input Voltage	5V
Input Power	2W
Enclosure Size	6.5x6.2x1 in. (16.5x15.8x2.5 cm)
Weight	1.43 lbs. (650 g)

SYSTEM COMPONENTS

- One Hybrid 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 hybrid 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.