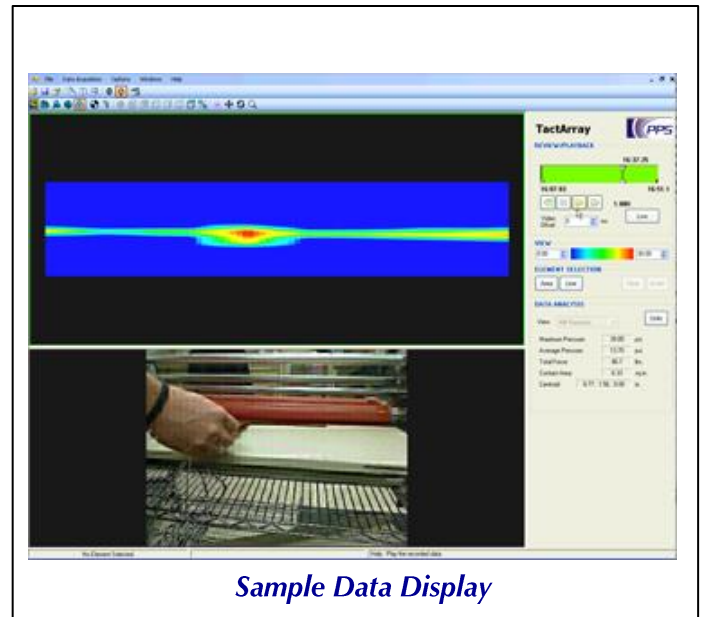




Industrial TactArray System



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.

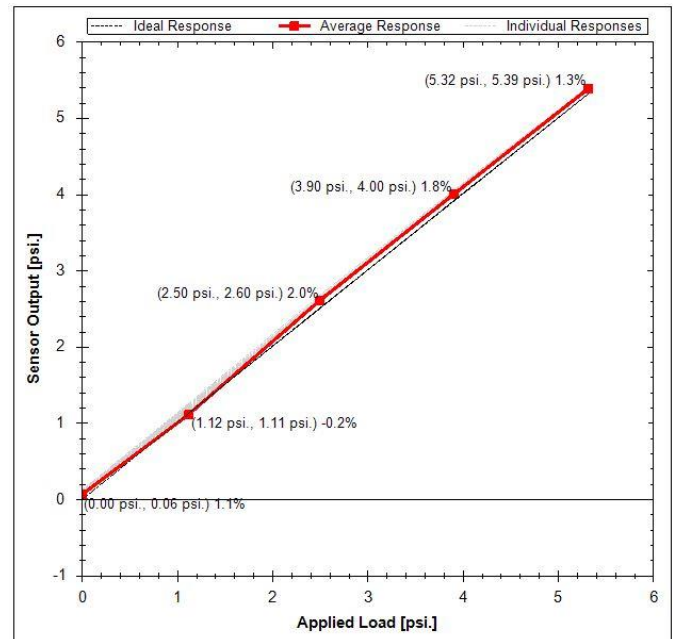
PPS's **Industrial TactArray Systems** are optimized for applications requiring tactile sensors that can withstand extremely high temperatures and pressures. These systems comprise of **Industrial TactArray** sensors that feature a flat and rigid Polyimide construction that is characterized by its stability across a wide temperature ranges.

Industrial TactArray sensors are able to measure pressure distribution up to 700 psi in temperatures up to 200°C. At a thickness of just 0.3 mm and 2D spatial resolutions as fine as 2mm, these sensors are not only one the thinnest high resolution tactile sensors in the market but they are also robust and able to accommodate moderate bending.

KEY SYSTEM FEATURES AND BENEFITS

- **Durable high-temperature and high-pressure tactile sensor system** suited for exacting measurement environments.
- **High-resolution sensor array scan measure pressure distribution** at levels of up to 700 psi and retain performance characteristics in temperatures up to 200C.
- **Enable real-time thermal compensation** that allows testing with Industrial TactArray systems to be done accurately under changing temperature conditions.
- **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	20, 200 or 700 PSI
Pressure Sensitivity	0.2%
Signal to Noise Ratio (SNR)	667:1
Repeatability Error	0.4%
Linearity	99.8%
Accuracy Error ³	<=5%
Contact Surface Material	Polyimide
Sensor Thickness	0.012 in (0.3 mm)
Cable Length	59 in (1.5m)
Operating Temperature	-40°C to 200°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 Industrial 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 industrial 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.