# AUTOMOTIVE OCCUPANT PRESSURE MEASUREMENT SYSTEM

Tactilus®

Multiple sensors comprise the occupant sensor system

Engineers can simultaneously measure multiple forces applied by an automobile occupant and collect the data in real time. Tactilus® software is essentially a dashboard control panel that assimilates the pipeline of data into comprehensible and easily interpretable images - all on one screen at the same time.

Tactilus® Technology: Tactilus® is a matrix-based tactile surface sensor, essentially an "electronic skin" that records and interprets pressure distribution and magnitude between any two contacting or mating surfaces. Each Tactilus® sensor is carefully assembled to exacting tolerances, individually calibrated and serialized. The architectural philosophy of Tactilus® is modular allowing for portability, easy expansion, and simultaneous data collection of up to 6 simultaneous sensor elements. The Tactilus® suite of software integrates the data collected into a powerful Windows® based tool kit and employs sophisticated mathematical algorithms that intelligently separate signal from noise, and advanced electronic shielding techniques to maximize the sensor's immunity to noise, temperature and humidity.
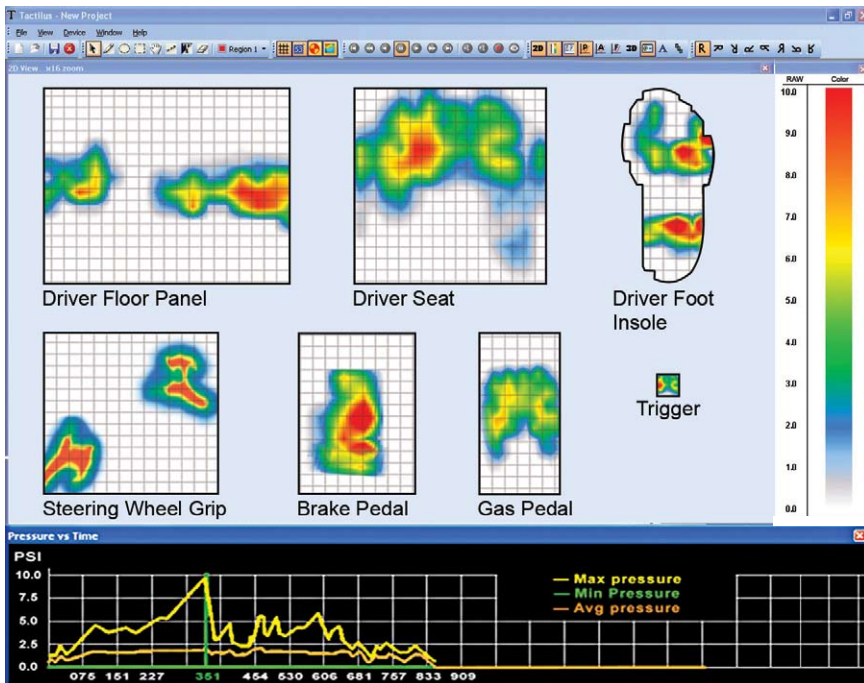
Surface pressure profiles on active surfaces

SENSOR SYSTEM COMPONENTS

- Floor Sensor
- Seat Sensor
- Steering Wheel Sensor
- Brake Pedal Sensor
- Gas Pedal·Sensor
- Insole Sensor

"Our primary proposition is to offer the client precisely what they require or need. To that end, everything we design with respect to the physical sensor element as well as our GUIs and DLLs can be completely tailored to your unique situation."

Jeffrey G. Stark. CEO

SENSOR SPECIFICATIONS

Technology	Piezoresistive
Surface Pressure Range	0 - 30 PSI (0 - 2.1 kg/cm^2)
Array Size	Multiple lined sensor elements
Sensing Points	Up to 4,096 total
Total Sensing Area	Customizable to application
Scan Speed	Up to 100 hertz
Spatial Resolution	Custom from 0.39 in (10 mm)
Thickness	30 mils (0.76 mm)
Accuracy	± 10%

www.sensorprod.com