

HS Tire System

For Dynamic Tire Testing

HS Tire system includes:

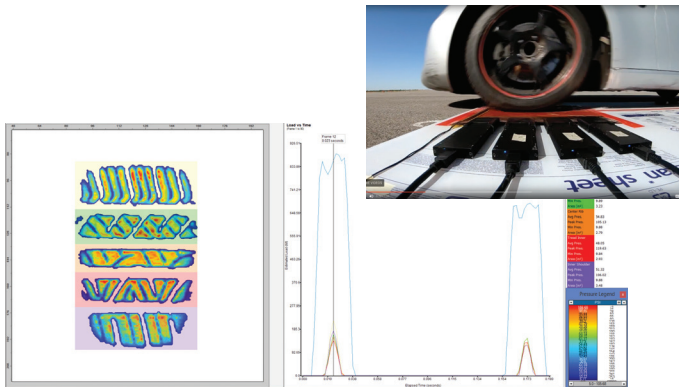
- = HX500 Sensor
- = Data Logger
- = HS Pro V8 Software

A Revolution in Dynamic Tire Testing

For the first time, tire design and test engineers can capture tire interface pressures in high resolution in fully dynamic conditions at speeds up to 140 km/h. With consistent and repeatable results, engineers are now able to compare accurate pressure data, analyze the performance of tire designs, and understand exactly what is happening at the tire contact patch. XSENSOR's powerful HX500 Sensor data logger and HS ProV8 Software generate actionable data not available with any other test system.

Generate repeatable accurate results without recalibration between tests.

- Measurement accuracy of $\pm 5\%$
- Sensor resolution of 1.54mm
- Frequency response over 150Hz to capture front and rear tire data

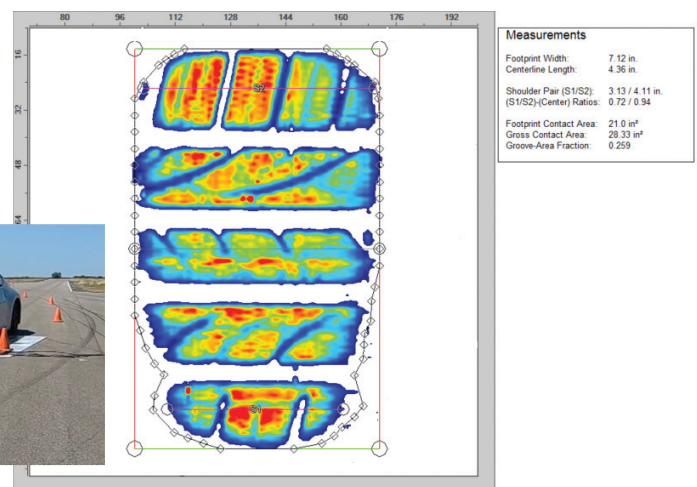


The HX510 sensor and ultra fast signal processing electronics provide consistent and repeatable results on a cell by cell basis.

HS Tire System is fully mobile and fast to set up for multiple test scenarios.

Capture accurate high resolution tire footprint images in fully dynamic conditions. Record and compare tire interface pressure measurements at various speed, cornering, inclination angles and inflation pressures to provide a complete understanding of tire performance.

- Advanced image filtering for ambient noise
- Visualize and evaluate suspension dynamics
- Complete tools for tire footprint pressure distribution and leading edge comparisons
- Software has automated tire analysis tools to analyze contact area, ratios and measurements
- Record full tire contact patch at over 450 fps



With 65,536 sensing points sampled at 450 fps, the HS Tire System generates high resolution images and accurate tire interface pressure data at speeds up to 140 km/h.

From the world leader in pressure imaging.

XSENSOR® Technology Corporation

HS Tire Features



HX510:256.256.16 Sensor

- Sensing points: 65,536
- Sensing Area: 40.6cm x 40.6cm (16in x16in)
- Resolution: 1.54mm (0.06in)
- Pressure Range: 3-137.9 N/cm² (5-200 psi)
- Frequency response: 3dB point >150Hz
- Expected Frame Rate: 468 fps*
- Durable, repeatable and responsive
- Available with custom pressure ranges

HS Pro V8 Software

- Establishes recording rates and synchronization protocols to generate high speed data acquisition
- Data files recorded to the data logger can be downloaded raw or calibrated
- View data live at frame rates exceeding 450 fps (with an Ethernet connection from the data logger)

HS Data Logger

- Configures and controls the HS Sensor Pack
- Detects user defined trigger condition
- Records data from up to 4 sensor packs to and up to a total 256 x 256 sensing array
- Operates in either streaming via Ethernet from high speed recording internal RAM
- Programmable triggers and pre/post-trigger information (both external signal or pressure threshold triggers are supported)
- Standalone operation

*Frames per second refers to the actual number of frames of data recorded and those can be viewed with the software. Frame rates estimated using the HS Controller in data logging mode.

About XSENSOR

XSENSOR has been a leading provider of pressure sensors for more than 20 years. The company's X3 PRO sensors are used in variety of automotive applications including seat design, tire design, wiper design and more.



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