# HS Tire System

*Intelligent Dynamic Sensing for Tire Testing*

**HS Tire System includes:**

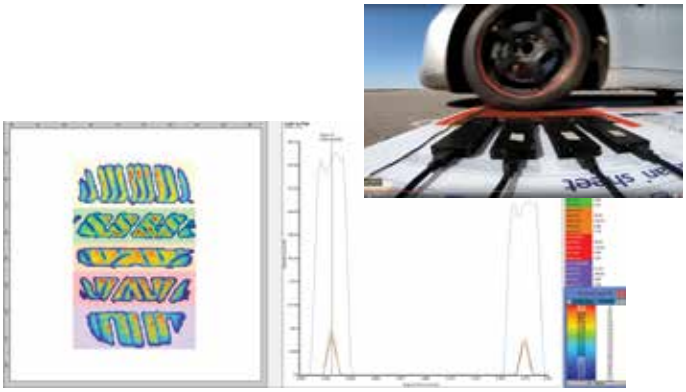
- HX510 Sensor
- Data Logger
- HS Tire V8 Software

## A Revolution in Dynamic Tire Testing

- High-speed system maximizes dynamic sensing with accuracy, precision, reliability, and repeatability.
- High-quality visualizations provide valuable tire design and performance insights.
- Advanced analysis and AI-powered algorithms generate actionable data.

### Generate accurate, precise, reliable, and repeatable results without recalibration between tests.

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



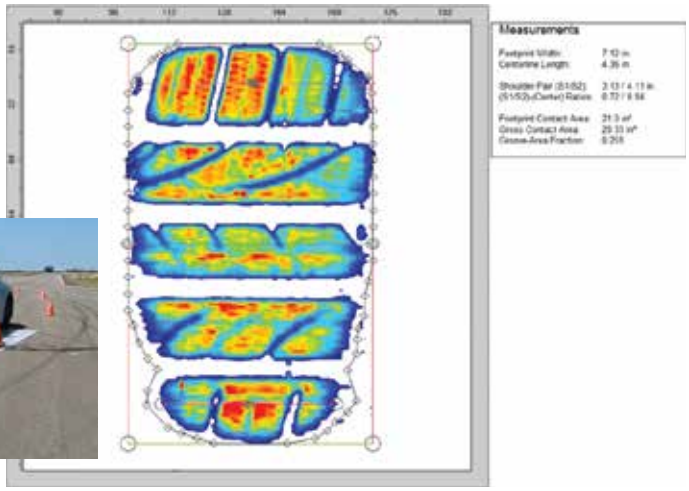
The HX510 sensor and ultra-fast signal processing electronics provide consistent and repeatable results on a cell by cell basis.

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.


### HS Tire System is mobile and quick to set-up for multiple test scenarios.

Capture high-resolution tire footprint images in dynamic conditions. Compare tire interface pressure measurements at various speeds, 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 comparisons
- Software has automated tools to analyze contact area, ratios, and measurements



# **HS Tire System** Features

### HX510:256.256.16 Sensor

- Sensing Points: 65,536
- Sensing Area: 40.6 cm x 40.6 cm (16 in x 16 in)
- Resolution: 1.54 mm (0.06 in)
- Pressure Range: 3-137.9 N/cm$^2$ (5-200 psi)
- Frequency Response: 3 dB point >150 Hz
- Expected Frame Rate: 468 fps*
- Durable, repeatable, and responsive
- Available with custom pressure ranges

### HS Tire 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 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 Data Logger in data logging mode.

### About XSENSOR

XSENSOR develops Intelligent Dynamic Sensing technology to improve safety, performance, and comfort.

XSENSOR® Technology Corporation

The Leader in Intelligent Dynamic Sensing

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