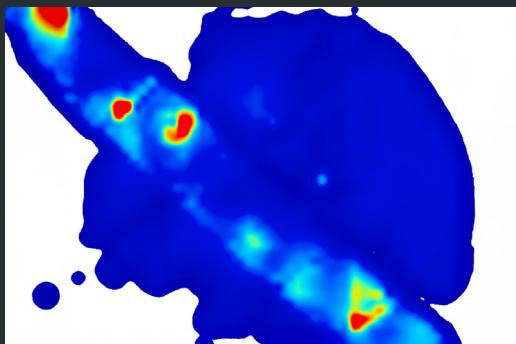


High-Speed (HS) Impact System

Advanced Impact Pressure Measurement for Automotive Safety

The High-Speed (HS) Impact System allows safety engineers to capture quantitative measurements and high-resolution visualizations of impact pressures from vehicle surfaces, as well as passive and active restraints during crash tests.

Each year, nearly 40,000 motor vehicle deaths occur in the US alone. Until now, the automotive industry has lacked the ability to measure impact pressure with both high speed and high resolution. Accurate data collection during impacts requires fast, responsive sensors combined with powerful analysis software — and the HS Impact System delivers precisely that.



Seatbelt and airbag pressure data.



KEY BENEFITS & FEATURES

Capture High-Speed, High-Resolution Impact Data

- Thin, flexible sensors with thousands of sensing points capture data at over 3,000 frames per second for unprecedented detail.
- High-speed pressure mapping software provides instant visualizations and deep analysis during and after crash events.

Improve Vehicle Design & Occupant Safety

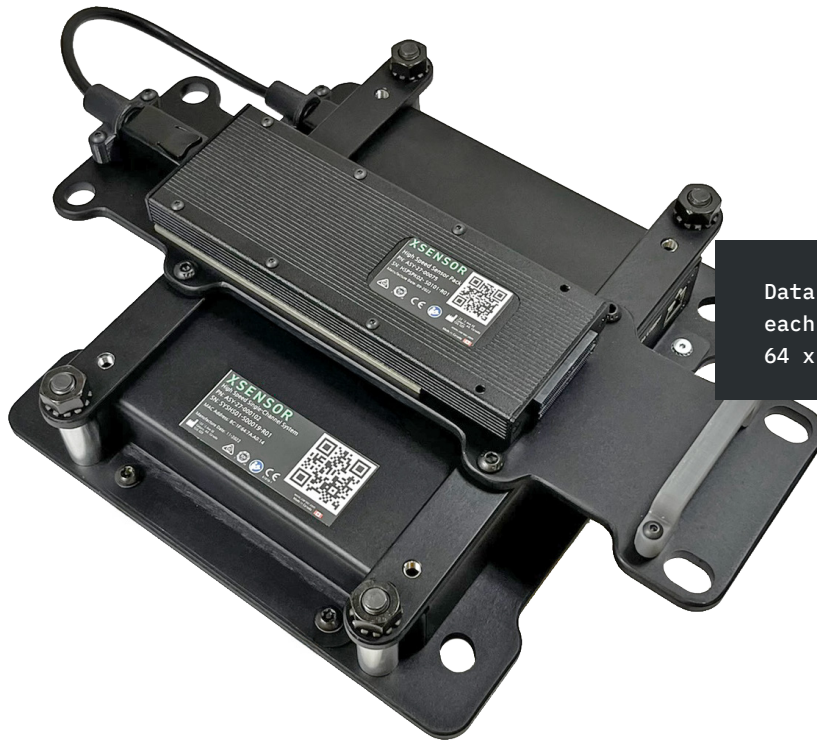
- Obtain detailed and repeatable impact pressure data to evaluate vehicle and restraint system performance with high accuracy.
- Visualize real-time pressure distributions from airbags, seatbelts, head restraints, and seat backs to identify high-risk areas and improve design for occupant protection.

Achieve Consistent, Repeatable Testing for Injury Prediction

- Rugged data logger, built for crash sled and in-vehicle testing, enables remote triggering and reliable data collection across multiple test cycles.
- Proven calibration stability ensures consistent accuracy, reducing recalibration frequency and enabling long-term use.

HS IMPACT SYSTEM SPECIFICATIONS

SENSOR	USE CASE	SAMPLE RATE (FPS)	PRESSURE RANGE N/CM ² (PSI)	SENSING AREA CM X CM (IN X IN)
HX210:48.64.02	Back-of-Seat	2,500	0.07 – 22 (0.1 – 32)	61 x 81 (24 x 31.9)
HX210:40.64.02	Back-of-Seat	3,000	0.07 – 22 (0.1 – 32)	51 x 81 (20.1 x 31.9)
HX210:50.50.05	Head Restraint	2,400	0.7 – 69 (1 – 100)	25.4 x 25.4 (10 x 10)
HX210:36.48.05M	Vest	3,300	0.7 – 207 (1 – 300)	18 x 24 (7.1 x 9.4)



Data logger records data from each sensor pack up to a total 64 x 64 sensing array.

OUR PLATFORM

INTELLIGENT DYNAMIC SENSING

The platform behind our vehicle safety testing products, Intelligent Dynamic Sensing, enables precise measurements and features highly detailed visualizations and smart data with AI-powered analysis — resulting in optimized performance, comfort, and safety.



Maximum performance sensing



Real-time data measurement and highest-quality visualizations



AI-powered data analysis and optimization

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To Learn More
or Schedule a
Demonstration

