

HS Impact System

Vehicle Safety & Impact Testing

KEY BENEFITS

HIGH-SPEED DATA CAPTURE

The thin, conformable sensors contain thousands of sensing points sampled at over 2,000 frames per second, offering unprecedented detail for analysis.

EVALUATE PRODUCT PERFORMANCE

Get impact pressure information to evaluate design performance. Ensure product and passenger safety with accurate and repeatable testing.

REPEATABLE TESTING PROCEDURES

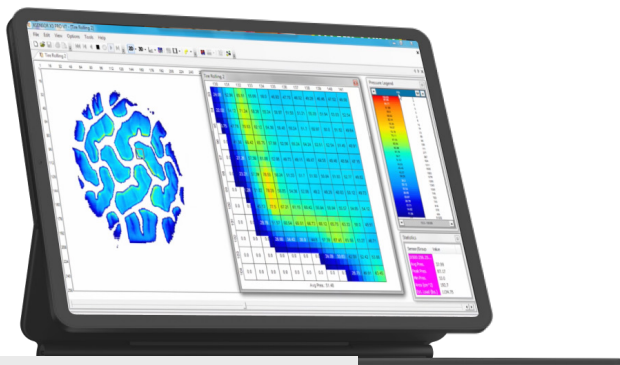
The rugged data logger is ready to be mounted to crash sleds and can be triggered remotely, allowing engineers to view interface pressure throughout the impact. The sensors maintain calibration, ensuring accuracy and repeatability.

Ensure product safety with high speed pressure data.

Motor vehicle deaths approach 40K each year in the US alone. Until now, the automotive industry has never had the ability to measure impact pressure at high resolutions and speeds. Acquiring accurate data during impacts requires fast and responsive sensors and powerful software tools.

The HS Impact system provides safety engineers with high-resolution impact data from surfaces and passive and active restraints during crash tests.

- Visualize how much interface pressure is being exerted on a driver from airbags and seatbelts during high speed front impacts.
- Minimize elevated body surface pressures and verify performance of head restraints and seat backs during high speed rear impacts.
- Proven calibration stability leads to consistent data over thousands of cycles, which means reduced re-calibration frequency and higher equipment availability.
- Impact force sensors provide accurate, consistent measurement and are capable of withstanding the vibration and shocks during normal use in crash test applications.



HS Impact software shows unprecedented detail.

HS IMPACT SYSTEM SPECIFICATIONS

SENSOR	USE CASE	SAMPLE RATE (FPS)	PRESSURE RANGE N/CM2 (PSI)	SENSING AREA CM X CM (IN X IN)
HX210:48.64.02	Back-of-Seat, Head Restraint	2,450	0.07 – 22 (0.1 – 32)	61 x 81 (24 x 31.9)
HX210:40.64.02	Back-of-Seat	2,800	0.07 – 22 (0.1 – 32)	61 x 81 (24 x 31.9)
HX210.50.50.05	Head Restraint	2,350	0.07 – 70 (1 – 100)	25.4 x 25.4 (10 x 10)
HX210.25.50.05	Small Surfaces	2,900	0.07 – 70 (1 – 100)	12.7 x 25.4 (5 x 10)



Data logger records data from up to four sensor packs and up to a total 256 x 256 sensing array.

OUR PLATFORM INTELLIGENT DYNAMIC SENSING

The platform behind our vehicle safety testing products, Intelligent Dynamic Sensing (IDS) enables precise measurements and features highly detailed visualizations and rich 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

XSENSOR

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