

SENSORS HX200:16.16.02

PRODUCT DESCRIPTION

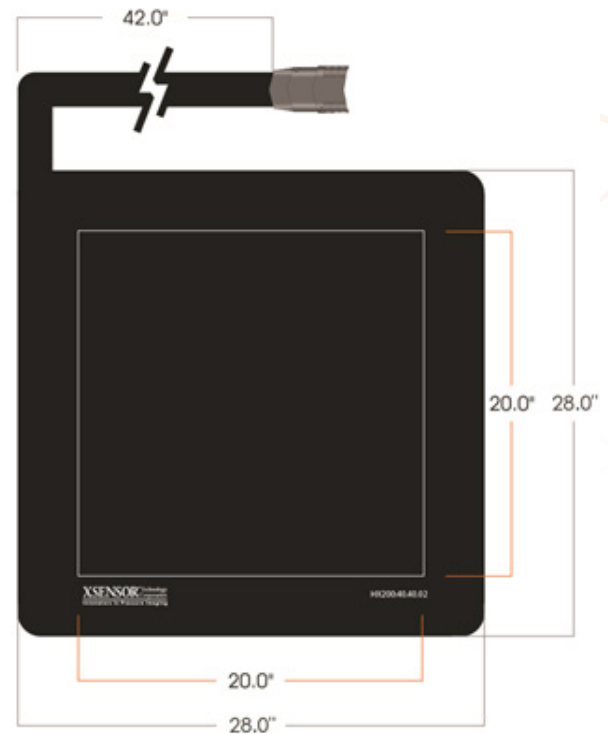
The X3 High Speed HX200 series of sensors are designed for applications which require higher frame rates and a faster dB point for gathering impact data. The sensors are intended to be used in automotive rear impact testing of car seats. The sensors can be placed between the dummy and the seat to understand impact pressures at 30km/hr. With a frame rate of 500 frames per second and a 3dB point of 25 Hz, the system provides information at point of contact and thereafter.

SENSING	
Sensor Technology	Capacitive Pressure Imaging
Pressure Range	0.1–15psi
	0.07–10.3N/cm ²
Spatial Resolution	0.5" 12.7mm
Accuracy	± 15% full scale*
Sampling Frame Rate	500 frames/s**

PHYSICAL CHARACTERISTICS		
Total Area	16" x 16"	40.6cm x 40.6cm
Sensing Area	8" x 8"	20.3cm x 20.3cm
Thickness (Sensing Area, uncompressed)	0.08"	0.2cm
Thickness (Border – cabling side)	0.06"	0.15cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	42" x 2" x 0.18"	106.7cm x 5.1cm x 0.5cm
Connector	4.76" x 2.76" x 0.09"	12.1cm x 7cm x 0.2cm

SENSING	
Ambient Temperature	10°C–40°C
Ambient Humidity	5% to 90% RH

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KEY FEATURES

- High-speed data acquisition of 500 frames per second
- Fast response time of dielectric resulting in a 3dB point of approximately 25 Hz.
- Calibration process designed to match testing requirements.
- Large enough to cover entire back of car seat
- Durable sensor that conforms well to surfaces and impact

REQUIREMENTS FOR OPERATION

- Each HX200:16.16.02 sensor must be connected to one X3 PRO SENSOR PACK
- The X3 PRO SENSOR PACK needs to be connected to an X3 PRO
- The X3 PRO needs to be connected to a power supply and a computer running XSENSOR software to function

* When verified using the standard XSENSOR verification process.

**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.