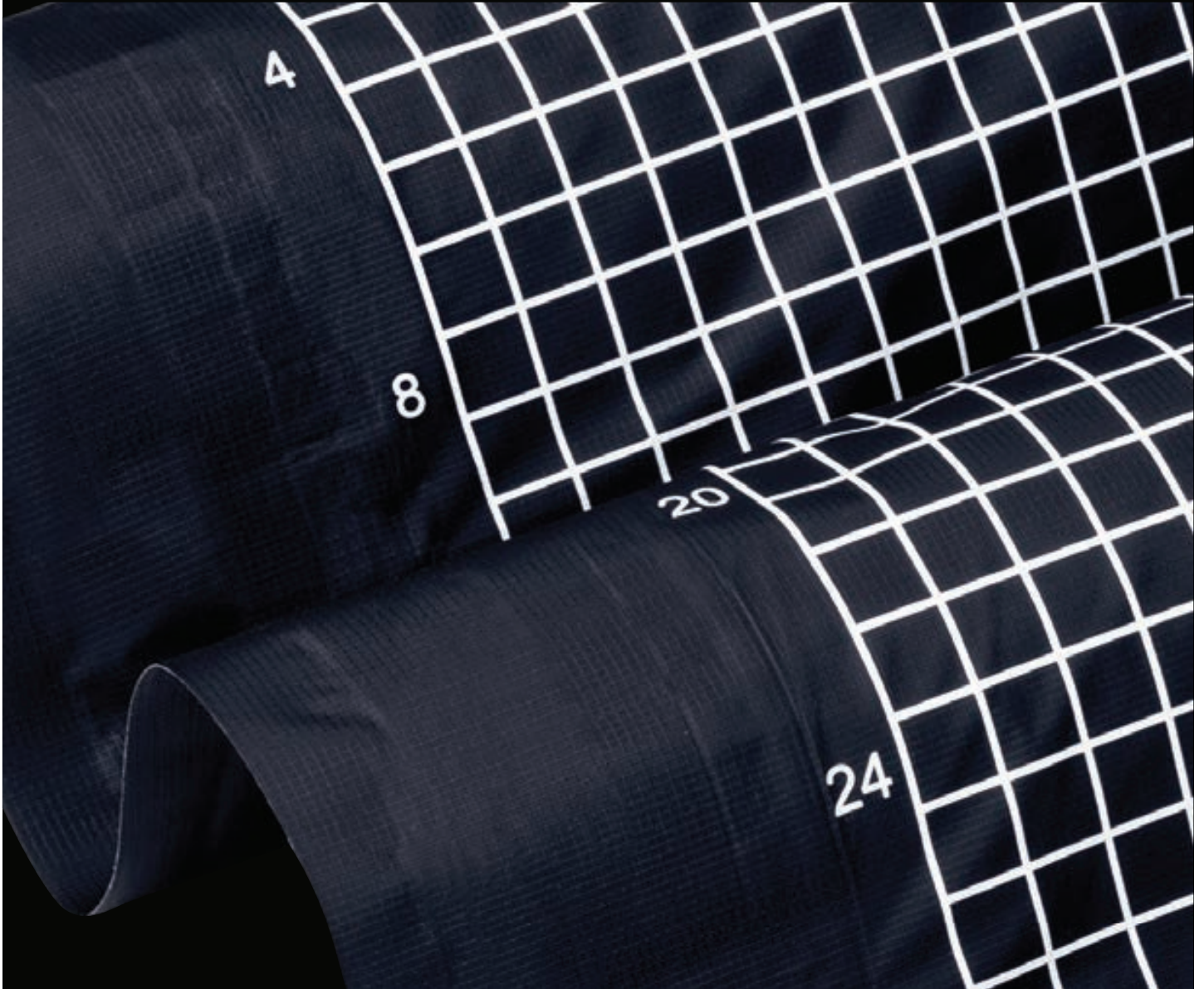# TEST & MEASUREMENT

PRODUCT CATALOGUE
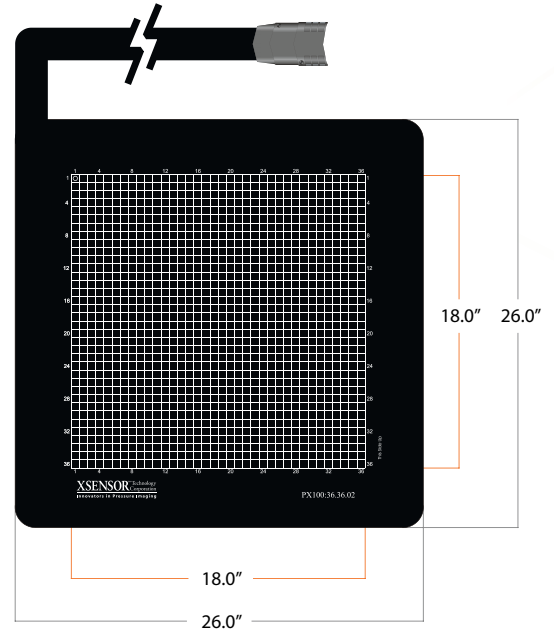
XSENSOR® Technology Corporation

PRODUCT DESCRIPTION

The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design. The PX100 series of sensors are known for accuracy, durability, and repeatability.

PX100:36.36.02

SENSING	
Sensor Technology	Capacitive Pressure Imaging
Pressure Range	0.2–3.87psi
	0.14–2.7N/cm²
Spatial Resolution	0.5" 12.7mm
Accuracy	± 10% full scale*
Sampling Frame Rate	45 frames/s**

PHYSICAL CHARACTERISTICS		
Total Area	26"x26"	66.0cm x 66.0cm
Sensing Area	18" x 18"	45.7cm x 45.7cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 1,296 sensing points
- Very good repeatability
- Good hysteresis and consistent data
- Designed for comfort and healthcare pressure seating applications
- Durable sensor that conforms well to surfaces
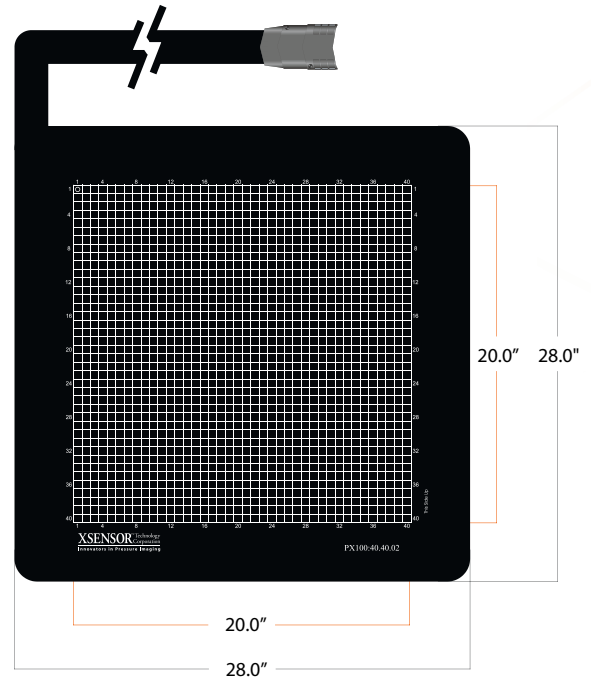
REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design. The PX100 series of sensors are known for accuracy, durability, and repeatability.

PX100:40.40.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	40 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	28 x 28	71.1cm x 71.1cm
Sensing Area	20" x 20"	50.8cm x 50.8cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 1,600 sensing points
- Very good repeatability
- Good hysteresis and consistent data
- Designed for comfort and healthcare pressure seating applications
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.
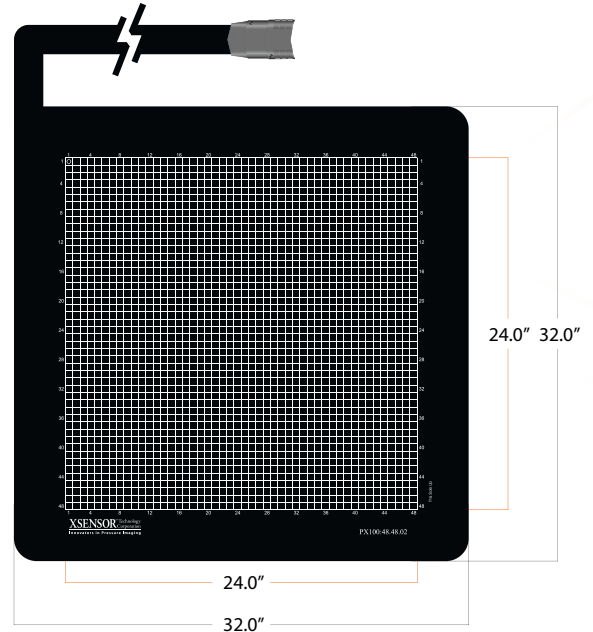
PRODUCT DESCRIPTION

The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design. The PX100 series of sensors are known for accuracy, durability, and repeatability.

PX100:48.48.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	32" x 32"	81.3cm x 81.3cm
Sensing Area	24" x 24"	60.9cm x 60.9cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,304 sensing points
- Very good repeatability
- Good hysteresis and consistent data
- Designed for comfort and healthcare pressure seating applications
- Durable sensor that conforms well to surfaces
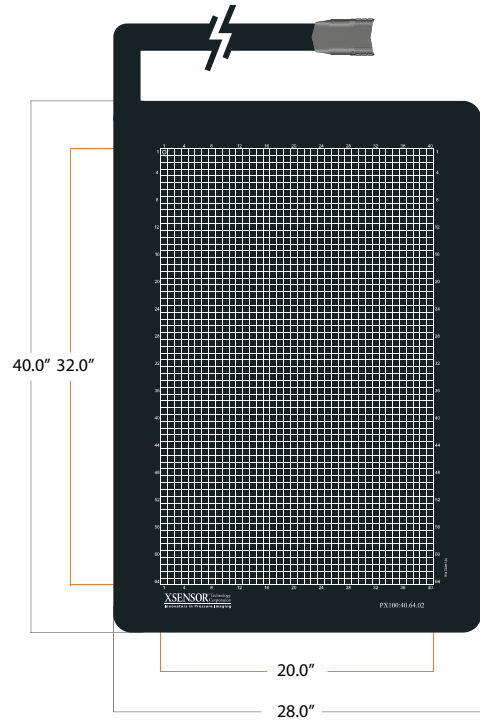
REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design. The PX100 series of sensors are known for accuracy, durability, and repeatability. The PX100:40.64.02 sensor is primarily used for measuring pressures on the back of a seat.

PX100:40.64.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	28" x 40"	71.1cm x 101.6cm
Sensing Area	20" x 32"	50.8cm x 81.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,560 sensing points

- Very good repeatability

- Good hysteresis and consistent data

- Designed for comfort and healthcare pressure seating applications

- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack

- X3 Pro Platform

- X3 Pro Power Supply

- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design. The PX100 series of sensors are known for accuracy, durability, and repeatability.

PX100:18.18.01
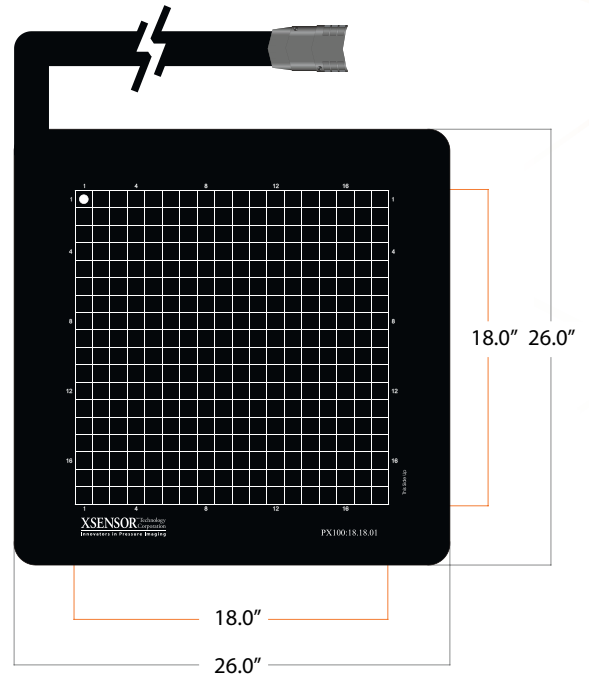
18.0" 26.0"

18.0"

26.0"

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm^2	
Spatial Resolution	1.0"	25.4mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	61 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	26" x 26"	63.5cm x 63.5cm
Sensing Area	18" x 18"	45.7cm x 45.7cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 25.4 mm pitch (resolution) and 324 sensing points
- Very good repeatability
- Good hysteresis and consistent data
- Designed for comfort and healthcare pressure seating applications
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
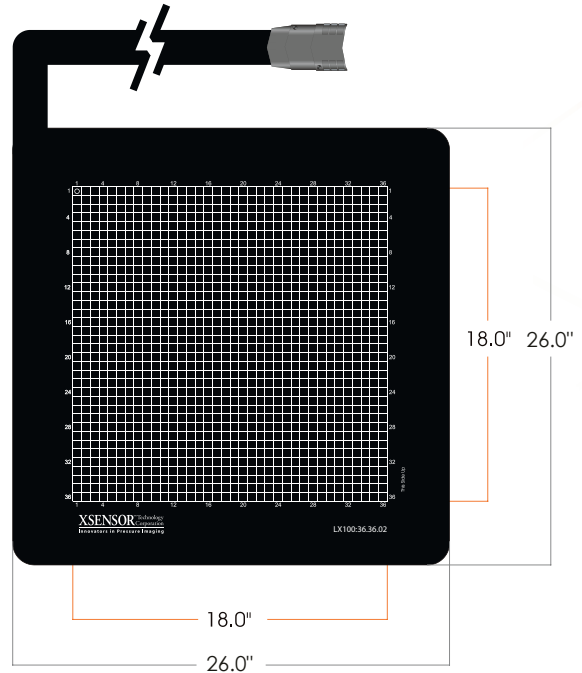- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PM Instrumentation

XSENSOR® Technology Corporation
Innovators in Pressure Imaging

PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:36.36.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–3.87psi	
	0.07-2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	45 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	26" x 26"	63.5cm x 63.5cm
Sensing Area	18" x 18"	45.7cm x 45.7cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 1,296 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for lower pressure seating applications such as comfort and quality testing
- Durable sensor that conforms well to surfaces
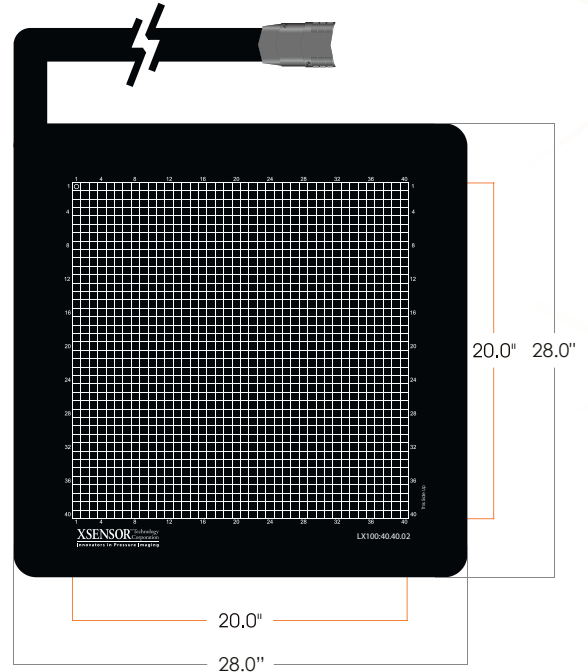
REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:40.40.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–3.87psi	
	0.07–2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	40 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	28" x 28"	71.1cm x 71.1cm
Sensing Area	20" x 20"	50.8cm x 50.8cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 1,600 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PM Instrumentation

XSENSOR Technology Corporation
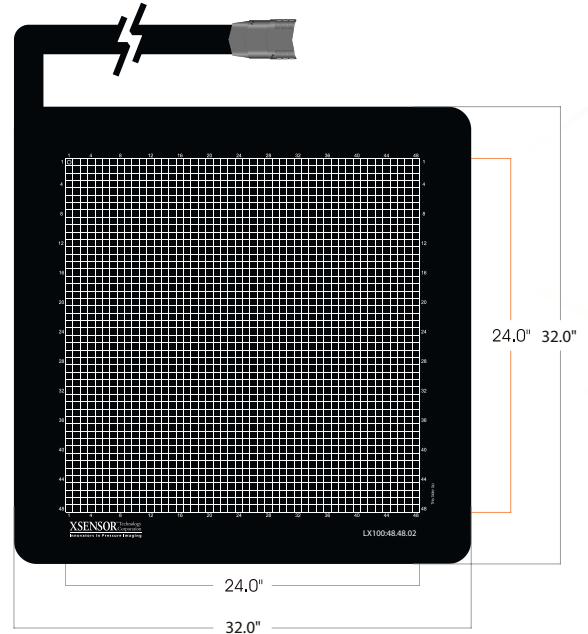Innovators in Pressure Imaging

PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics.

The LX100 series of sensors are often used for automotive and aerospace seating design and comfort analysis. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:48.48.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–3.87psi	
	0.07–2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	32" x 32"	81.3cm x 81.3cm
Sensing Area	24" x 24"	60.9cm x 60.9cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	5.1cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,304 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.
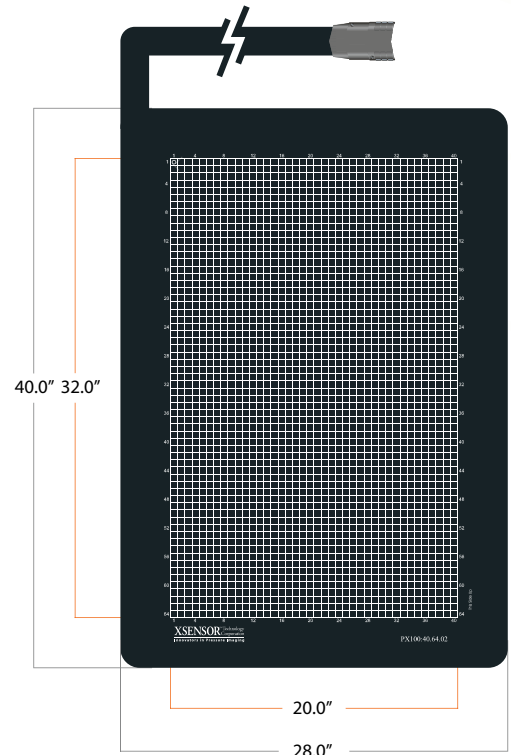
PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:40.64.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-3.87psi	
	0.07-2.7N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	28" x 40"	71.1cm x 101.6cm
Sensing Area	20" x 32"	50.8cm x 81.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,560 sensing points
- Very good repeatability
- Low hysteresis and consistent data
- Designed for comfort and healthcare pressure seating applications
- Durable sensor that conforms well to surfaces with a proven track record
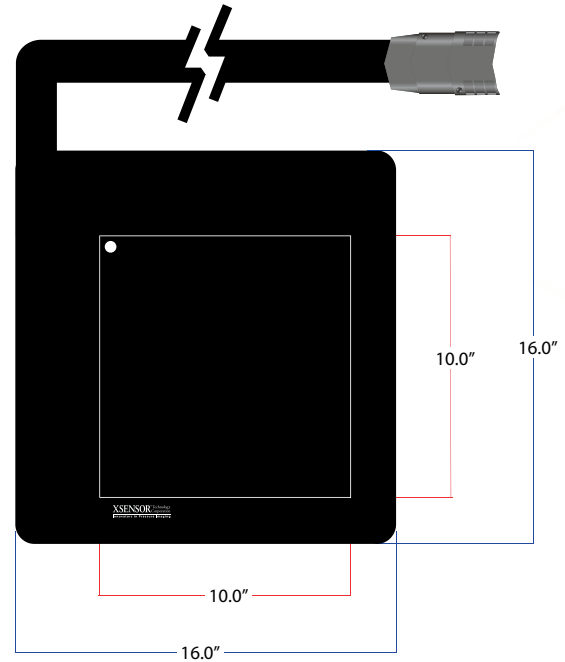
REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:100.100.10

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–3.87psi	
	0.07–2.7N/cm^2	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	14 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	16" x 16"	40.7cm x 40.7cm
Sensing Area	10" x 10"	25.4m x 25.4cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.1"	0.25cm
Border Width (cabling side)	4"	10.2cm
Border Width (non-cabling side)	2"	5.1cm
Cable	31.5" x 2" x 0.03"	80cm x 5.1cm x 0.76cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 2.54mm pitch (resolution) and 10,000 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

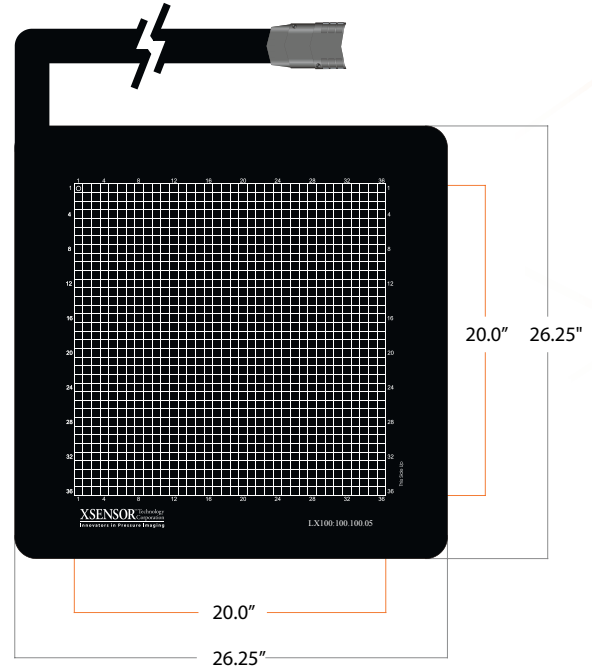* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:100.100.05

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-3.87psi	
	0.07-2.7N/cm^2	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	15 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	26.25" x 26.25"	66.7cm x 66.7cm
Sensing Area	20" x 20"	50.8cm x 50.8cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	4.25"	10.8cm
Border Width (non-cabling side)	2"	5.1cm
Cable	43.5" x 2" x 0.3"	110.5cm x 5.1cm x 0.8cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 5.08 mm pitch (resolution) and 10,000 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
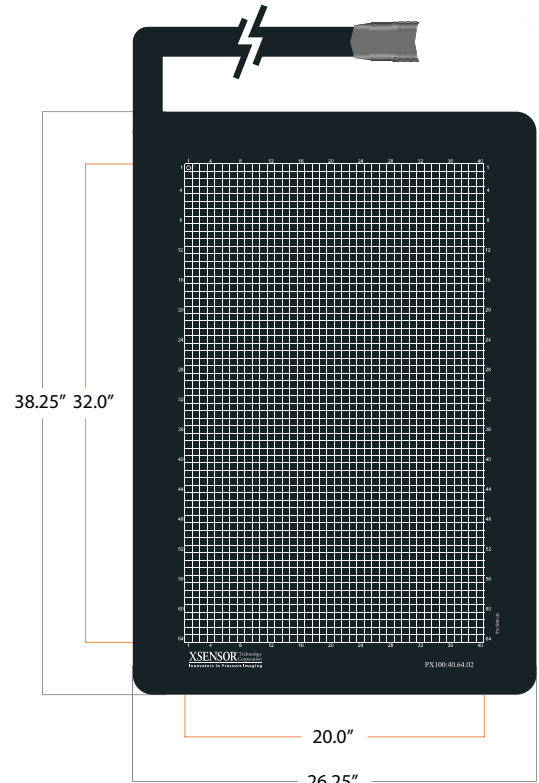- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

LX100:100.160.05

SENSING	
Sensor Technology	Capacitive Pressure Imaging
Pressure Range	0.1-3.87psi
	0.07-2.7N/cm^2
Spatial Resolution	0.2" · 5.08mm
Accuracy	± 5% full scale*
Sampling Frame Rate	15 frames/s**

PHYSICAL CHARACTERISTICS		
Total Area	26.25" x 38.25"	66.7cm x 97.2cm
Sensing Area	20" x 32"	50.8cm x 81.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.08"	0.2cm
Border Width (cabling side)	4.25"	10.8cm
Border Width (non-cabling side)	2"	5.1cm
Cable	43.5" x 2" x 0.47"	110.5cm x 5.1cm x 1.2cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 5.08 mm pitch (resolution) and 16,000 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
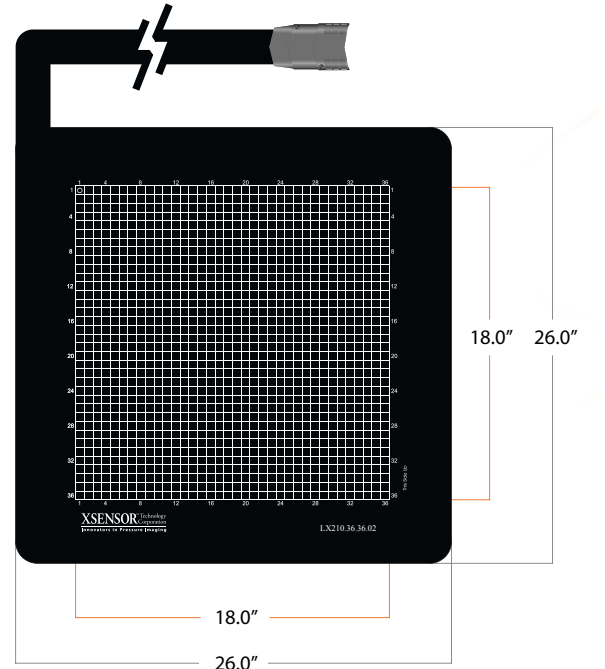- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingress-egress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their pressure range they have also been used in a variety of research and product testing environments.

LX210:36.36.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07–10.3N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	45 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	26" x 26"	62.2cm x 62.2cm
Sensing Area	18" x 18"	45.7cm x 45.7cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 1,296 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
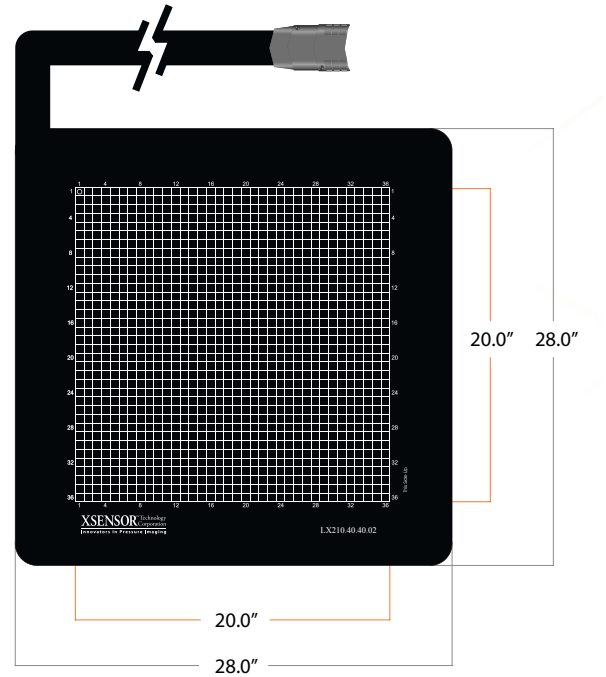- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingress-egress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their pressure range they have also been used in a variety of research and product testing environments.

LX210:40.40.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07–10.3N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	40 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	28" x 28"	67.3cm x 67.3cm
Sensing Area	20" x 20"	50.8cm x 50.8cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 1,600 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.
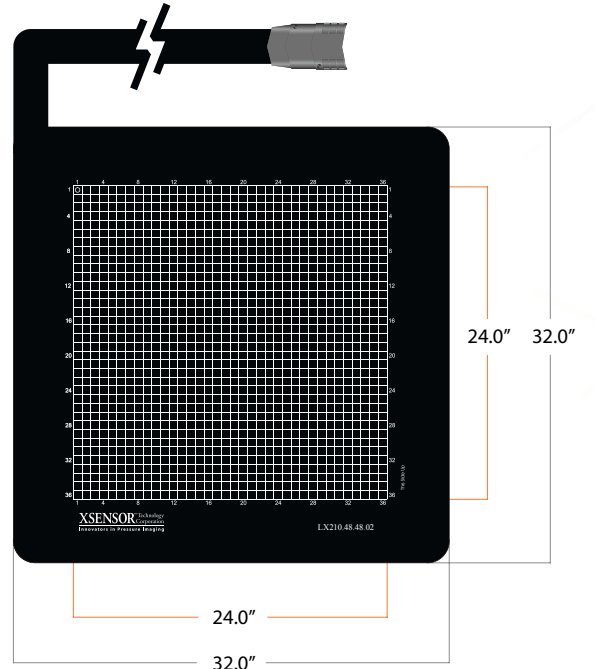
PRODUCT DESCRIPTION

The X3 LX210 replaces the LX200 series. They are designed as a confirmable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingress-egress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their pressure range they have also been used in a variety of research and product testing environments.

LX210:48.48.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07–10.3N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	32" x 32"	81.3cm x 81.3cm
Sensing Area	24" x 24"	60.9cm x 60.9cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,304 sensing points
- Very good repeatability
- Low hysteresis and consistent data throughout long trials
- Designed for higher pressure seating applications such as ingress-egress testing
- Durable sensor that conforms well to surfaces

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.
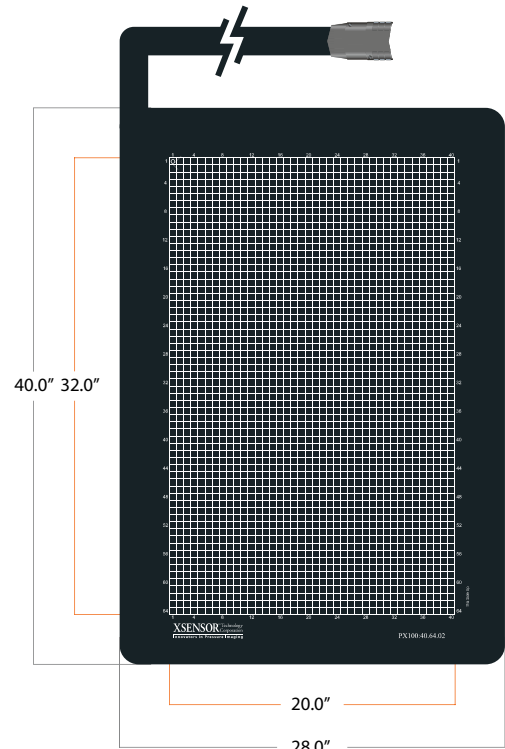
PRODUCT DESCRIPTION

The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingress-egress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate due to high repeatability, low hysteresis, and low creep characteristics. Due to their pressure range they have also been used in a variety of research and product testing environments.

LX210:40.64.02

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07–10.3N/cm^2	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	28" x 40"	71.1cm x 101.6cm
Sensing Area	20" x 32"	40.8cm x 81.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

KEY FEATURES

- High-resolution sensors with a 12.7 mm pitch (resolution) and 2,560 sensing points
- Very good repeatability
- Low hysteresis and consistent data
- Designed for comfort and healthcare pressure seating applications
- Durable sensor that conforms well to surfaces with a proven track record

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

The LX205 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design.

LX205:100.100.10
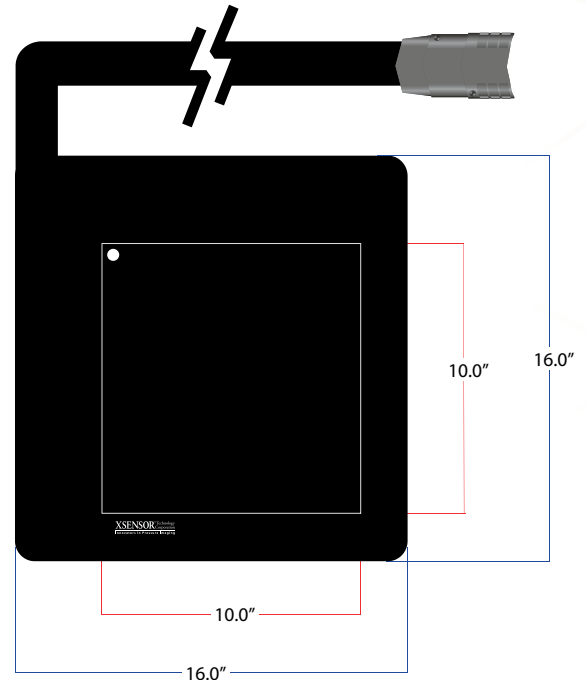
SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-15psi	
	0.14-10.3N/cm^2	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	14 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	16" x 16"	40.7cm x 40.7cm
Sensing Area	10" x 10"	25.4cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	4"	10.2cm
Border Width (non-cabling side)	2"	5.1cm
Cable	31.5" x 2" x 0.3"	80cm x 5.1cm x 0.76cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

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

10.0"
16.0"
10.0"
16.0"

KEY FEATURES

- High-resolution sensors with a 2.54 mm pitch (resolution) and 10,000 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both lab and environmental testing

REQUIREMENTS FOR OPERATION

- X3 Pro Sensor Pack
- X3 Pro Platform
- X3 Pro Power Supply
- X3 Pro Software

* When verified using the standard XSENSOR verification process.
**Sampling rate based on using X3 PRO Electronics. Frame rate may vary based on computer configuration.

PRODUCT DESCRIPTION

PRO V8 Software

The PRO V8 Software is an essential part of the PRO V8 product series. Developed with the power user in mind, the PRO V8 Software features a faster, more powerful engine with enhanced analytical tools. The software package offers 2D, 3D, and graphing view options. The data is viewed dynamically and recorded as a XSENSOR file format. Recorded data can be exported for further analysis or imported into other applications such as Matlab.

The PRO V8 software has many analytical tools for general research purposes as well as specific functions and tools for automotive and tire designers. Easily stream video along pressure images, create sensor groupings, make measurements, and compare multiple files.

PRO – SOFTWARE FEATURES

Engine Performance Improvements
- Collected data is saved immediately to the disk, thereby reducing the risk of data loss
- Over 100% faster frame rate for a 4 sensor pack system with 65,536 sensing points
- Load or save up to 500GB files in under 1 second
- Allows for sessions with up to 100 million frames or 500GB of data

File Comparison Tools
- Simultaneous playback of up to 4 files
- Multiple frame and file comparisons
- Windshield wiper sensor users can graph multiple files for product and data comparisons

Measurement Tools
- Line measurement allows users to measure pressure image dimensions
- Area measurement allows users to calculate areas within a pressure image

Imaging Tools
- Thumbnail preview strip displays each frame in filmstrip format
- Thumbnail view includes preview of attached videos, photos, and notes
- Improved overall frame navigation
- Improved 2D zoom functionality

Export/Analysis Tools
- Copy, paste and select pressure values from 2D image directly into spreadsheet
- Export a sensor group in its original shape directly into a spreadsheet
- Copy and paste cross-section values into spreadsheets (cross-hair or average)
- Export files into html-viewable format

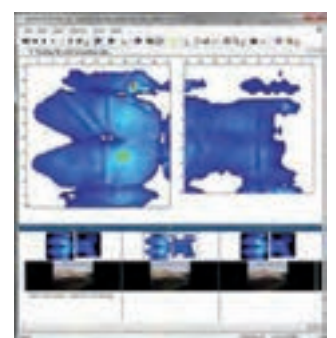* Dual core processor computer required. Also dependent on sensor configuration.
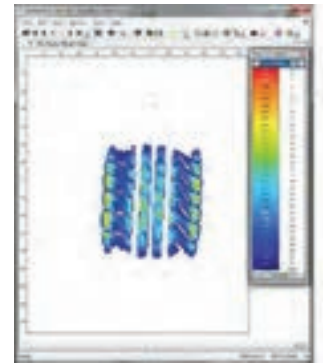

2D Car Tire
(IX500:256.256.22)
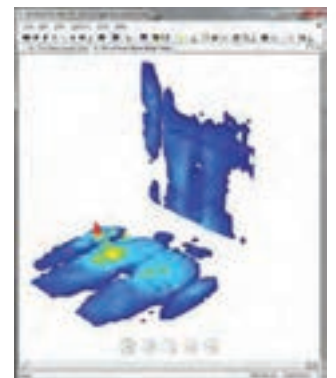
3D Car Seat
(LX100:48.48.02)

Video Streaming Car Seat
(PX100:40.40.02 & PX100:36.36.02)

PRO V8 Software

FEATURES

X3 Connection Status	View the connection status of all sensors, sensor packs, and electronics* connected to your computer. Toggle the view mode to see sensor usage statistics, such as when the sensor was last calibrated and the length of time the sensor has recorded data.
Dynamic Preview Mode	View live, dynamic data before recording to ensure relevant information is captured.
Record Live Pressure Imaging Sessions	Capture and record pressure imaging data for analysis and review.
Time and Recording Triggers	Set recording session delays and triggers to capture specific data.
Pressure Movie Creation	Generate movie files in XSENSOR software to share dynamic sessions with those who do not have XSENSOR software.
Video Sync	Record and synchronize digital video (DV) cameras, using IEEE 1394 FireWire or USB webcams to XSENSOR pressure imaging files.
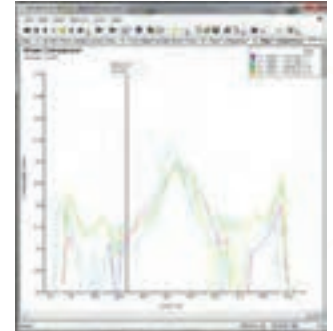
2D Wiper Blade Comparison
(PX100:1.64.02)
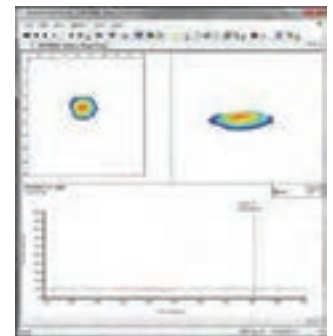
Air Pressure on Sensor
(PX100:36.36.02)

VIEWS

Each XSENSOR view mode has multiple settings and options to control sensor data viewing:

2D	Top view of the sensor shows pressure levels in different colours defined by the pressure isobar legend; view can be rotated or flipped to match positioning.
3D	Perspective view of the sensor shows pressure levels in different colours and height contours; rotate view in any direction to maximize visual clarity.
Frame Compare	Show up to 4 snapshots side-by-side for easy comparison.
Pressure vs. Time	Graph pressure readings over time; pressure reading can be either peak or average for the sensor.
Numeric Mode	2D mode shows numerical pressure readings in each sensing cell and dynamic full-colour display.

XSENSOR® Pro V8 PRESSURE IMAGING SOFTWARE

The most powerful pressure imaging software just got better. Introducing ProV8.

XSENSOR's Pro software has been the industry leader for pressure testing and measurement for years. Pro software provides a dynamic way for design and test engineers to gather pressure data in high resolution and process the information for comparisons and calculations. It's ease-of-use, stability and data integrity makes it the go-to tool for automotive and performance engineers working in a wide range of applications.

Pro software features include:
- Record live, real-time interface pressures
- View pressure images in 2d and 3d
- Stream video
- Analyze, review, and export pressure data:
  - Select frames and sensor groups within recordings
  - Compare frames
  - Analyze peaks/averages
- Advanced toolsets for tire/seating/wiper design

WHAT'S NEW IN VERSION 8?

BATCH EXPORT OF RAW OR CALIBRATED FILES

With the release of ProV8, engineers can now record sessions in RAW mode and then apply a calibration file to one, or more recorded files at the same time. So, no matter where the session is recorded, a single calibration file can be applied to all of the data.

MERGE RECORDINGS FROM DIFFERENT SENSORS

Sessions can now be merged using sensors of different shapes and sizes and data can be appended or combined into a single continuous file. You can now combine the data from up to eight sensors and have the ability to show them all running simultaneously, side-by-side, within one window.
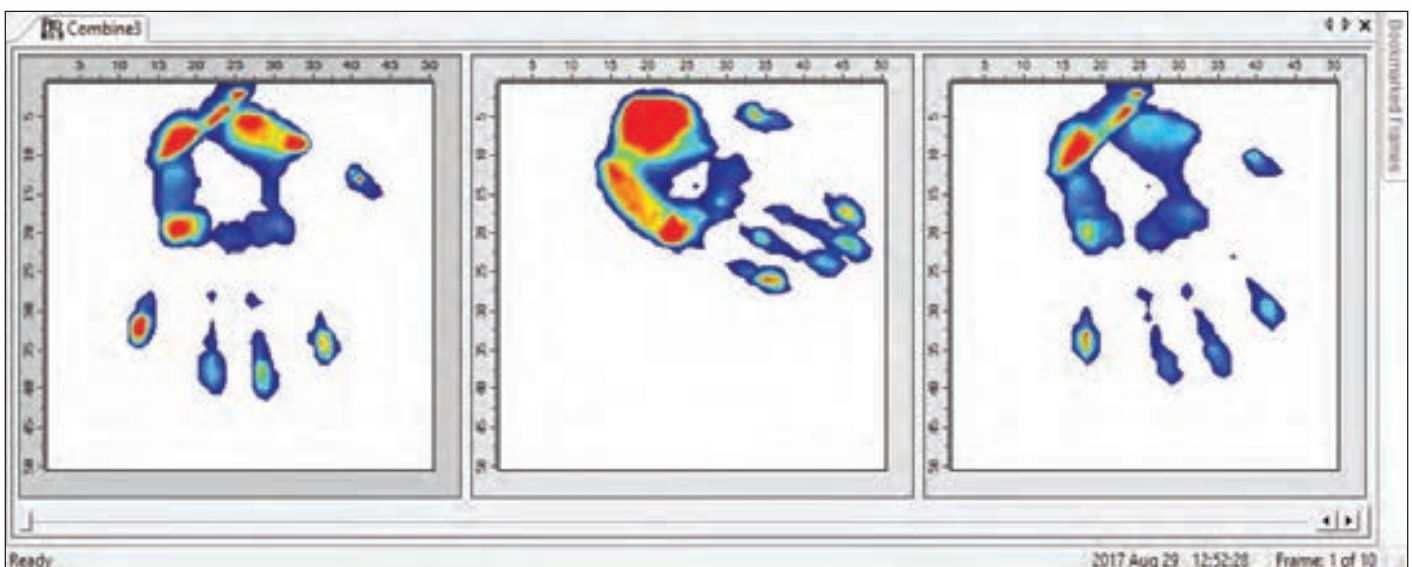
XSENSOR® Pro V8 PRESSURE IMAGING SOFTWARE

MORE CONTROL OF DATA EXPORTS

Powerful improvements in export controls make working with large data sets simple. Users can export only the data that is needed for analysis. And with ProV8, a frame, or series of frames can now be exported at intervals determined by the user, with a wider selection of export formats including .xsensor, .csv, and more.

NEW TIRE DESIGN FEATURES

A new feature of ProV8 is especially beneficial to tire designers who are now better able to measure contact areas and determine how edges of the tire contact patch will be rendered. And the ability to export an .svg file means that pressure images can be printed to scale.
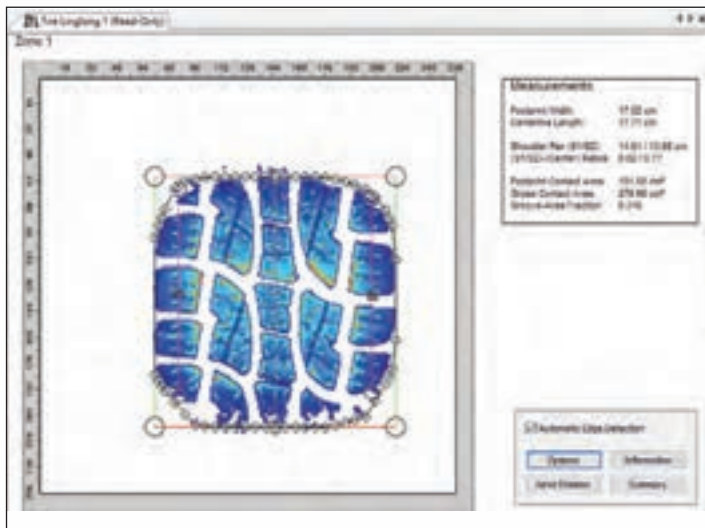
IMPROVED GRAPHICS

Pro software provides a visually rich environment for viewing and assessing data. With ProV8, sensor margins are more clearly defined, making it easer to focus on areas of interest. Improvements to measurement tools, zoom functionality and sensor positioning makes it easier than ever to see what needs to seen, and measure what needs to be measured.

New Features and Enhancements

Merge Sessions
• Allows the combining of separate session files. Useful for side-by-side data analysis

Export Sessions
• Scalable Vector Graphics (SGV) 2D export which allows full scale printing via third-party support
• New frame selection methods for exporting frames including regular intervals and frame averaging
• Sensors can be reordered during export
• Bookmarked Frames allows users to highlight frames of interest for quick navigation and export

User Interface Enhancements
• Sensor Group center of pressure indicators
• Size of "Center of Pressure Indicator" now adjustable
• 2D sensor margins with sensel counts or length units
• Optional manual placement of the sensors in 2D and 3D
• Improved sensel magnification in 2D
• 2D/3D contouring using b-cubic magnification for smoother rendering

Other
• Raw sessions can be converted to calibrated sessions
• Video capture from two web cameras
• Improved playback performance
• Improved time stamp accuracy
• Recording rate can be modified for existing sessions
• XSNReader DLL allows direct access to XSN files via a C programming interface

ELECTRONICS

X3 PRO Platform

X3 PRO Sensor Pack

PRODUCT DESCRIPTION

The **X3 PRO** Platform provides four data ports, control signals, communication relay functionality, electrical isolation and power for the sensor system.

FEATURES		
Display Functionality	LED: green-power on, amber-malfunction	
Sensor Cell Capacity	256x256	
Sensor Ports	4	
POWER		
External Power Supply	Input: 100-240 VAC, 47-63Hz, 1.35 A Output: 12 VDC, 3.75 A	
Power Consumption	1 W	
PHYSICAL CHARACTERISTICS		
Length	4.5"	11.4cm
Width	3.5"	8.9cm
Height	0.9"	2.3cm
Weight	4.8oz	135g
ENVIRONMENT		
Operating Range (Temp.)	10°C to 40°C	
Ambient Humidity	80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C	
USB Port		
USB Input	USB 2.0, Full Speed	
USB Cable (sold separate)	185cm length	

PRODUCT DESCRIPTION

The **X3 PRO** Sensor Pack contains the sensing electronics of the system including one communication port.

FEATURES		
Display Functionality	LED: green-power on, amber-malfunction	
Sensor Cell Capacity	64x64	
Sampling Rate	112,000 sensels/sec	
Sampling Resolution	16 bit	
Min Cell Measurement Time	35 µsec	
POWER		
Power Consumption	2 W	
PHYSICAL CHARACTERISTICS		
Length	3.9"	9.8cm
Width	2.5"	6.4cm
Height	0.7"	1.8cm
Weight	6.3oz	180g
Cable Length	78"	198.1cm
ENVIRONMENT		
Operating Range (Temp.)	10°C to 40°C	
Ambient Humidity	80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C	

X3 Node

PRODUCT DESCRIPTION

The **X3 NODE** provides three additional data ports, control signals, communication relay functionality, electrical isolation and power for the sensor system. An X3 NODE is connected to a port on the X3 PRO Electronics Platform to expand the number of sensor connections.

FEATURES

Sensor Cell Capacity	192x192
Sensor Ports	3

POWER

Power Consumption	100 mW

PHYSICAL CHARACTERISTICS

Length	2.3"	5.7cm
Width	3.5"	6.4cm
Height	0.7"	1.8cm
Weight	3.0oz	85g
Cable Length	9.4"	24cm

ENVIRONMENT

Operating Range (Temp.)	10°C to 40°C
Ambient Humidity	80% for temperatures up to 31C and decreasing linearly to 50% at 40°C

X3 Power Supply

X3 Battery Pack

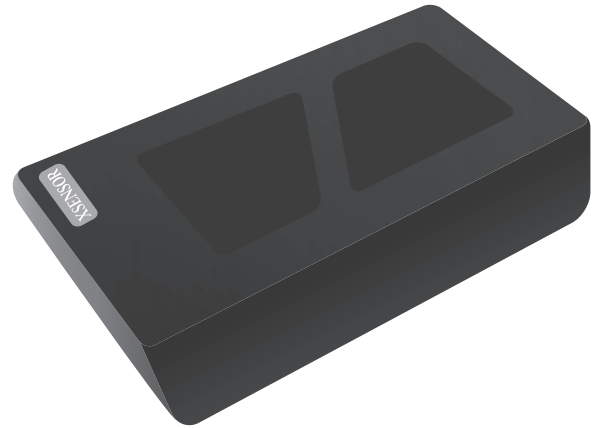| PRODUCT DESCRIPTION		
The **X3 Power Supply is a certified power supply that is sold with country specific power cords**.		
POWER		
External Power Supply	Input: 100-240 VAC, 47-63 Hz, 1.35 A Output: 12 VDC, 3.75 A	
Maximum Output Power	45 W	
PHYSICAL CHARACTERISTICS		
Length	5.7"	14.5cm
Width	3.0"	7.6cm
Height	1.7"	4.3cm
Weight	16.6oz	470g
Cable Length – Power Supply	78.7"	200cm
Cable Length – Power Cord	82.7"	210cm
ENVIRONMENT		
Operating Range (Temp.)	10°C to 40°C	
Ambient Humidity	80% for temperatures up to 31°C and decreasing linearly to 50% at 40°C	

PRODUCT DESCRIPTION		
The **X3 Battery Pack** contains a Lithium-ion Battery and a carry case. The battery is connected from the carry case into the X3 PRO Platform Electronics.		
FEATURES		
Battery	Lithium-ion Battery	
Recharger	External Lithium-ion Recharger	
Run Time	5 hours	
BATTERY POWER		
Capacity	13,200 mAh	
PHYSICAL CHARACTERISTICS OF BATTERY CASE		
Length	3.5"	8.9cm
Width	2.5"	6.4cm
Height	2.1"	5.3cm
Weight	13oz	370g
Cable Length	30"	76cm
Electrical Characteristics		
Output Voltage	11.1V	
Charge Voltage	12.6V	
Cutoff Voltage	9V	
Maximum Output Current	2.0A	

X3 Carry Case – Soft shell

X3 Carry Case – Hard shell

PRODUCT DESCRIPTION

The **X3Carry Case - Soft** is the standard carry case which comes with most systems. The case is designed to carry a rolled sensor and all the corresponding X3 PRO Electronics, X3 PRO Software CD, and User Guide.

PHYSICAL CHARACTERISTICS

Length	33"	83.8cm
Width	6"	15.2cm
Height	8"	20.3cm
Weight	24oz	680g

PRODUCT DESCRIPTION

The **X3 Carry Case - Hard** is an optional carry case designed for durability. It is primarily used by engineers who require a portable and durable carry case for travel purposes.

PHYSICAL CHARACTERISTICS

Length	33 1/2"	85cm
Width	6 1/2"	16.5cm
Height	8"	20.3cm
Weight	120oz	3,400g

X3 Carry Case – IX500:256:256:22

X3 Carry Case – IX500:256:256:16

PRODUCT DESCRIPTION		
The **X3 Carry Case – Tire Sensors (IX500:256.256.22)** The IX500:256.256.22 Tire Sensor Carry Case is fitted to the dimensions of this specific sensor. The case also has compartments for each of the X3 PRO Electronic components and software CD.		
PHYSICAL CHARACTERISTICS		
Length	27"	68.6cm
Width	3"	7.6cm
Height	23"	58.4cm
Weight	48oz	1,360g

PRODUCT DESCRIPTION		
The **X3 Carry Case – Tire Sensors (IX500:256.256.16)** The IX500:256.256.16 Tire Sensor Carry Case is fitted to the dimensions of this specific sensor. The case also has compartments for each of the X3 PRO Electronic components and software CD.		
PHYSICAL CHARACTERISTICS		
Length	33"	83.8cm
Width	3"	7.6cm
Height	27"	68.6cm
Weight	56oz	1,587g

PM _
Instrumentation

XSENSOR® Technology Corporation
Innovators in Pressure Imaging

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