# Test & Measurement Product Catalog

Sensors, software, electronics & accessories

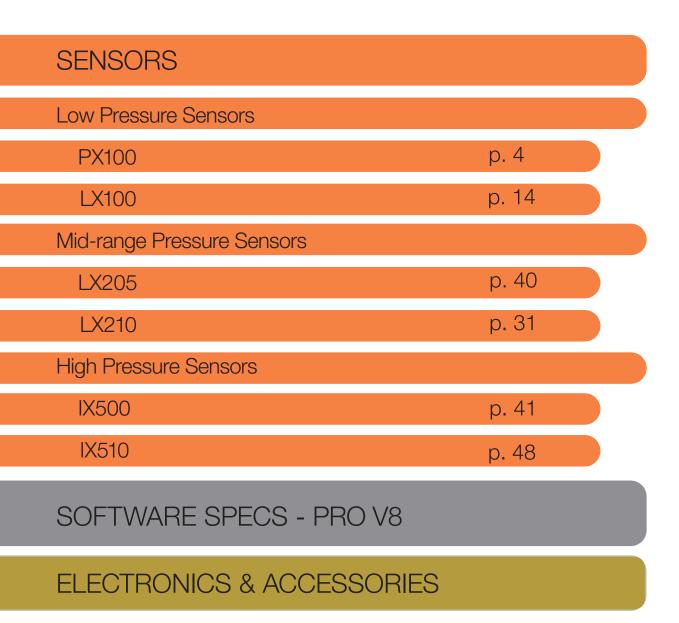
XSENSOR

Intelligent Dynamic Sensing





# **PRODUCT INDEX**



2 Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.



# SENSORS

Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.

nbn Austria GmbH

Riesstraße 146, 8010 Graz



# SENSORS PX100:36.36.02

### PRODUCT DESCRIPTION

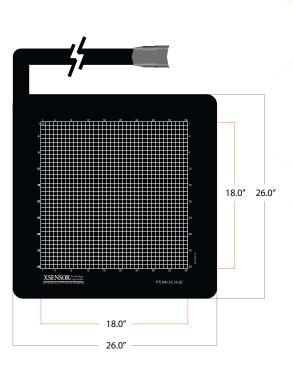
The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product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

SENSING		
Sensor Technology	Capacitive Pres	sure Imaging
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm <sup>2</sup>	
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

#### PX100:36.36.02



#### **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.



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#### nbn Austria GmbH

Riesstraße 146, 8010 Graz

# SENSORS **PX100:40.40.02**

### PRODUCT DESCRIPTION

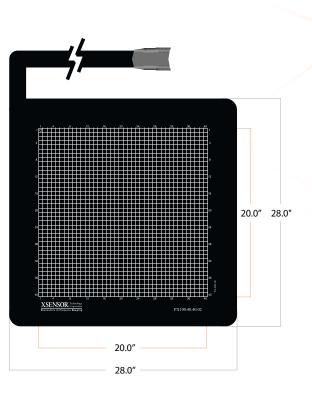
The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm <sup>2</sup>	
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

#### PX100:40.40.02



#### **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.



Innovators in Pressure Imaging

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#### nbn Austria GmbH

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Riesstraße 146, 8010 Graz

# SENSORS PX100:48.48.02

### PRODUCT DESCRIPTION

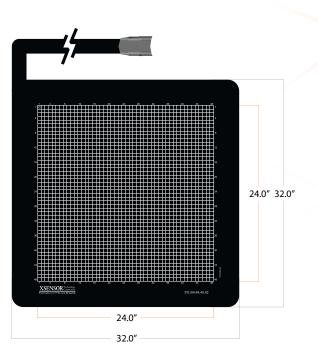
The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product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

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm <sup>2</sup>	
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

PX100:48.48.02



#### **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.



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# SENSORS **PX100:40.64.02**

# 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.

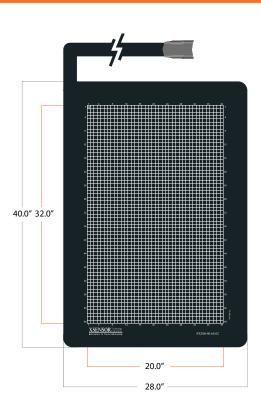
SENSING
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Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm <sup>2</sup>	
Spatial Resolution	0.5" 12.7mm	
Accuracy	± 10% full scale*	
Sampling Frame Rate	39 frames/s**	

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

#### PX100:40.64.02



#### **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.



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#### nbn Austria GmbH

# SENSORS PX100:18.18.01

#### PRODUCT DESCRIPTION

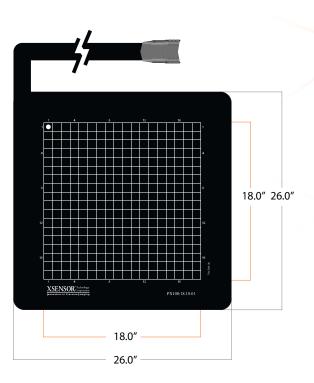
The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.2-3.87psi	
	0.14-2.7N/cm <sup>2</sup>	
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

#### PX100:18.18.01



#### **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.



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#### nbn Austria GmbH

### 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 PX100:48.144.02 sensor is primarily used for pressure mapping hospital beds and mattresses.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–1.0psi 0.2–3.87psi	
	0.07–0.69N/cm², 0.14–2.7N/cm²	
Spatial Resolution	0.5"	12.7mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	23 frames/s**	

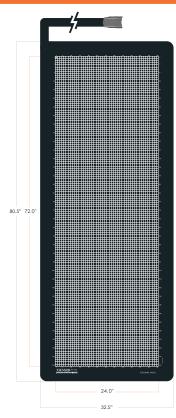
PHYSICAL CHARACTERISTICS		
Total Area	32.5" x 80.5"	82.6cm x 204.5cm
Sensing Area	24" x 72"	60.9cm x 182.9cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.08"	0.2cm
Border Width (cabling side)	5.5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.5"	118cm 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

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#### PX100:48.144.02



#### **KEY FEATURES**

- High-resolution sensors with a 12.7 mm pitch (resolution) and 6,912 sensing points
- Very good repeatability
- Good hysteresis and consistent data
- Designed for hospital bed applications
- Durable sensor that conforms well to surfaces

#### REQUIREMENTS FOR OPERATION

- 3 X3 Pro Sensor Packs
- 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.



Innovators in Pressure Imaging



nbn Austria GmbH Riesstraße 146, 8010 Graz

### 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 PX100:64.160.02 sensor is primarily used for pressure mapping hospital beds and mattresses.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–1.0psi 0.2–3.87psi	
	0.07–0.69N/cm², 0.14–2.7N/cm²	
Spatial Resolution	0.5" 12.7mm	
Accuracy	± 10% full scale*	
Sampling Frame Rate	17 frames/s**	

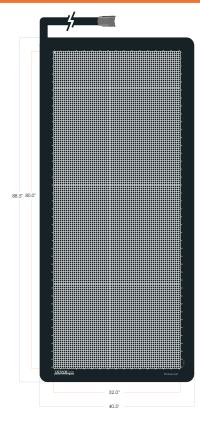
PHYSICAL CHARACTERISTICS		
Total Area	40.5" x 88.5"	102.9cm x 224.8cm
Sensing Area	32" x 80"	81.3cm x 203.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.08"	0.2cm
Border Width (cabling side)	5.5"	12.7cm
Border Width (non-cabling side)	3"	7.6cm
Cable	43.5" x 2" x 0.5"	118cm 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

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#### PX100:64.160.02



#### **KEY FEATURES**

- High-resolution sensors with a 12.7 mm pitch (resolution) and 10,240 sensing points
- Very good repeatability
- Good hysteresis and consistent data
- Designed for hospital bed applications
- Durable sensor that conforms well to surfaces

#### **REQUIREMENTS FOR OPERATION**

- 3 X3 Pro Sensor Packs
- 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.



Innovators in Pressure Imaging



#### nbn Austria GmbH

# SENSORS **PX100:26.64.01**

#### PRODUCT DESCRIPTION

The X3 PX100:26.64.01 sensor is a mattress sensor used for medical and consumer mattress research and product testing. The sensor has a 1¼" resolution which provides a quality image of the mattress surface. The sensor conforms well to surfaces and has a durability and consistency suitable for hospital and consumer testing environments.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–1.0psi 0.2–3.87psi	
	0.07–0.69N/cm², 0.14–2.7N/cm²	
Spatial Resolution	1¼" 31.75mm	
Accuracy	± 10% full scale*	
Sampling Frame Rate	53 frames/s**	

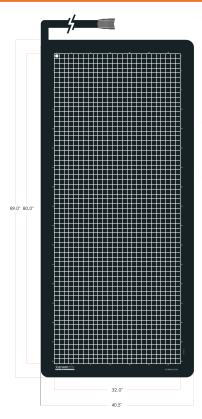
PHYSICAL CHARACTERISTICS		
Total Area	40.5" x 89"	102.9cm x 226.1cm
Sensing Area	32" x 80"	81.2cm x 203.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.04"	0.1cm
Border Width (cabling side)	5.5"	14cm
Border Width (non-cabling side)	3", 3.5"	7.6, 8.9cm
Cable	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

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#### PX100:26.64.01



#### **KEY FEATURES**

- High-resolution sensors with a 31.75 mm pitch (resolution) and 1,664 sensing points
- Designed for hospital and consumer mattress product testing and research.
- Excellent for both lab and environmental testing
- Durable sensors that performs well in hospital settings

#### **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.



Innovators in Pressure Imaging



nbn Austria GmbH Riesstraße 146, 8010 Graz

# PRODUCT DESCRIPTION

The X3 PX100:10.160.10-05 is a high resolution wiper blade sensor which replaces the PX100:1.160.05. The sensing area has been made wider (2.54cm) and provides more sensing points. The new design is more sensitive to lower pressures and provides better line load estimates. The sensor has been specifically made to test the profiles of wiper blades and the wiper blade arms.

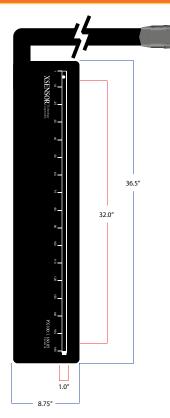
The sensor design is based on industry needs for assessing and comparing different wiper blade profiles and different wiper blade designs. The sensor can be mounted onto a test bench or taped onto a windshield. Wiper blades are then moved onto the sensor area and a repeatable and consistent pressure profile can be viewed and compared using the X3 PRO Software.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1 – 3.87 psi	
	0.07 – 2.7 N/cm <sup>2</sup>	
Spatial Resolution	0.1" x 0.2"	2.54cm x 5.08mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	20 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	8.75" x 36.5"	22.2cm x 92.7cm
Sensing Area	1.0" x 32"	2.54cm x 81.3cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.08"	0.2cm
Border Width (cabling side)	3", 6.25"	7.6cm,15.9cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	43.5" x 2" x 0.5"	110.5cm x 5.08cm x 1.2cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7.0cm x 2.3cm

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

#### PX100:10.160.10-05



#### **KEY FEATURES**

- High-resolution sensors has a 2.54mm row resolution x
   5.08mm column resolution with 1,600 sensing points
- Designed for viewing the pressure profile of a wiper blade on a windshield or test bench
- Provides consistent and repeatable profiles
- Very stable images with little variance
- Maintains calibration, limited recalibration required

#### **REQUIREMENTS FOR OPERATION**

- 3x X3 Pro Sensor Packs
- 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.



Innovators in Pressure Imaging



# nbn Austria GmbH

# PRODUCT DESCRIPTION

The X3 PX100:10.64.10-02 is a high resolution wiper blade sensor which replaces the PX100:1.64.02. The sensing area has been made wider (2.54cm) and provides more sensing points. The new design is more sensitive to lower pressures and provides better line load estimates. The sensor has been specifically made to test the profiles of wiper blades and the wiper blade arms.

The sensor design is based on industry needs for assessing and comparing different wiper blade profiles and different wiper blade designs. The sensor can be mounted onto a test bench or taped onto a windshield. Wiper blades are then moved onto the sensor area and a repeatable and consistent pressure profile can be viewed and compared using the X3 PRO Software.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1 – 3.87 psi	
	0.07 – 2.7 N/cm <sup>2</sup>	
Spatial Resolution	0.1" x 0.5"	2.54cm x 12.7mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	40 frames/s**	

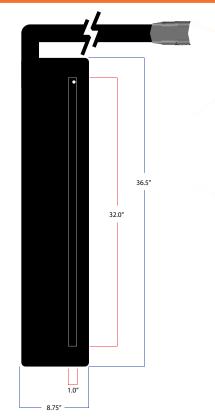
PHYSICAL CHARACTERISTICS		
Total Area	8.75" x 36.5"	22.2cm x 92.7cm
Sensing Area	1.0" x 32"	2.54cm x 81.3cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	3" 6.25"	7.6cm,15.9cm
Border Width (non-cabling side)		3.8cm
Cable	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 7.0cm x 2.3cm

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

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#### PX100:10.64.10-02



#### **KEY FEATURES**

- High-resolution sensors has a 2.54mm row resolution x 12.7mm column resolution with 640 sensing points
- Designed for viewing the pressure profile of a wiper blade on a windshield or test bench
- Provides consistent and repeatable profiles
- Very stable images with little variance
- Maintains calibration, limited recalibration required

#### **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.



Innovators in Pressure Imaging



#### nbn Austria GmbH

# SENSORS LX100:36.36.02

# PRODUCT DESCRIPTION

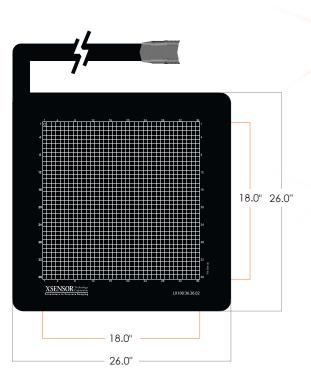
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–3.87psi	
	0.07-2.7N/cm <sup>2</sup>	
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

#### LX100:36.36.02



#### **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.



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# SENSORS LX100:40.40.02

# PRODUCT DESCRIPTION

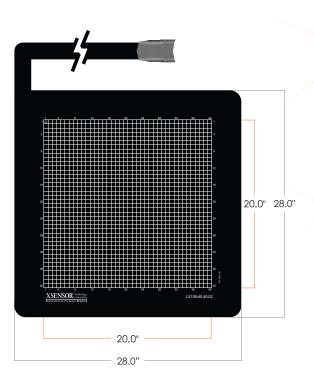
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–3.87psi	
	0.07-2.7N/cm <sup>2</sup>	
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

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

#### LX100:40.40.02



#### **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.



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# SENSORS LX100:48.48.02

# 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.

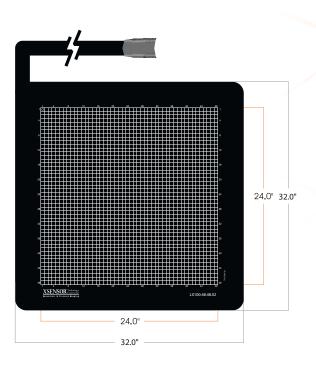
The LX100 series of sensors are often used for automotive and aerospace seating design and comfort analysis. Due to their accuracy, repeatability, and durability they are also used for automated quality control processes.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–3.87psi	
	0.07–2.7N/cm <sup>2</sup>	
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

# LX100:48.48.02



#### **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.



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# SENSORS LX100:40.64.02

### PRODUCT DESCRIPTION

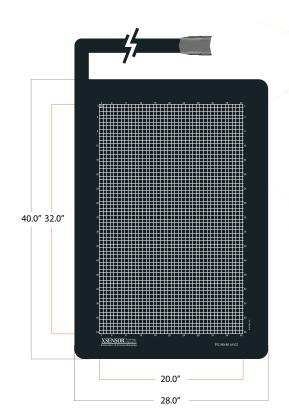
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07-2.7N/cm <sup>2</sup>	
Spatial Resolution	0.5" 12.7mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 fran	nes/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

#### LX100:40.64.02



#### **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.



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# SENSORS LX100:40.40.10

# 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.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07-2.7N/cm <sup>2</sup>	
Spatial Resolution	0.1" 2.54mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 fran	nes/s**

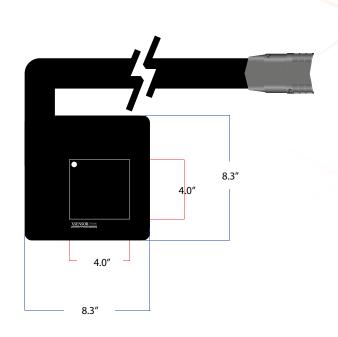
PHYSICAL CHARACTERISTICS		
Total Area	8.3" × 8.3"	21.1cm x 21.1cm
Sensing Area	4" x 4"	10.2cm x 10.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.08"	0.2cm
Border Width (cabling side)	2.8"	7.1 cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	31.5" x 2" x 0.16"	80cm 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

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#### LX100:40.40.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 1,600 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.



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# PRODUCT DESCRIPTION

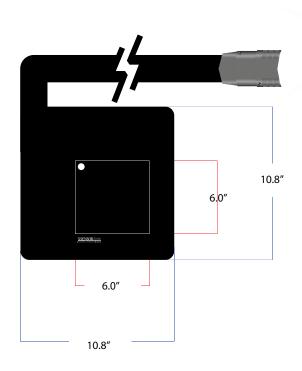
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07N-2.7/cm <sup>2</sup>	
Spatial Resolution	0.1" 2.54mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	30 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.8" × 10.8"	27.4cm x 27.4cm
Sensing Area	6" x 6"	10.2cm x 10.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.08"	0.2cm
Border Width (cabling side)	3.3"	8.4cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	31.5" x 2" x 0.16"	80cm 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

#### LX100:60.60.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 3,600 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.



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# SENSORS LX100:25.100.10

# PRODUCT DESCRIPTION

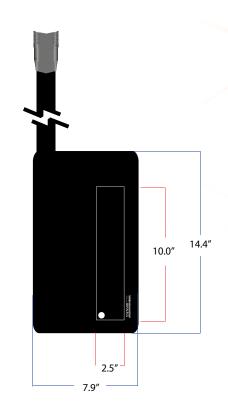
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1– 3.87 psi	
	0.07– 2.7 N/cm²,	
Spatial Resolution	0.1" 2.54mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	73 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	7.9" x 14.4"	20.1cm x 36.6cm
Sensing Area	2.5" x 10"	6.35cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.1"	0.25cm
Border Width (cabling side)	2.68"x3.5"	6.8x9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	31.5" x 2" x 0.27"	80cm x 5.1cm x 0.7cm
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

#### LX100:25.100.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 2,500 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

- 2 X3 Pro Sensor Packs
- 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.



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# SENSORS LX100:50.100.10

# PRODUCT DESCRIPTION

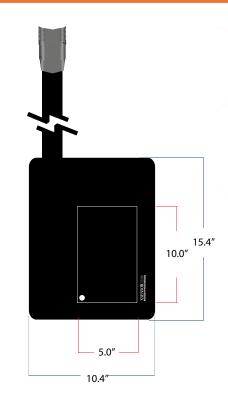
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–3.87psi	
	0.07-2.7N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	36 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	104" × 15.1"	26.4cmx38.4cm
Sensing Area	5" x 10"	6.35cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.1"	0.25cm
Border Width (cabling side)	3.3"x3.65"	8.4x9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	31.5" x 2" x 0.27"	80cm x 5.1cm x 0.7cm
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

#### LX100:50.100.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch ٠ (resolution) and 5,000 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**

- 2 X3 Pro Sensor Packs
- 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.



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# PRODUCT DESCRIPTION

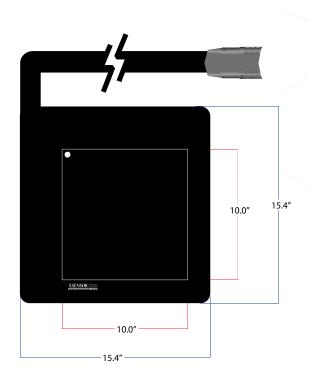
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

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

PHYSICAL CHARACTERISTICS		
Total Area	15.4" × 15.4"	39.1cm x 39.1cm
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)	3.65"	9.3cm
Border Width (non-cabling side)	1.75"	44cm
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

#### LX100:100.100.10



#### **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**

- 2 X3 Pro Sensor Packs
- 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.



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# SENSORS LX100:100.100.05

# 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.

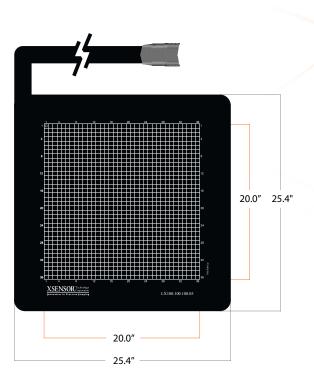
SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.	87psi
	0.07-2.7N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	15 frames/s**	

# PHYSICAL CHARACTERISTICS

Total Area	25.4" x 25.4"	64.5cm x 64.5cm
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)	3.65"	9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
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

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

# LX100:100.100.05



#### **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

- 2 X3 Pro Sensor Packs
- 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.



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# SENSORS LX100:100.160.05

### PRODUCT DESCRIPTION

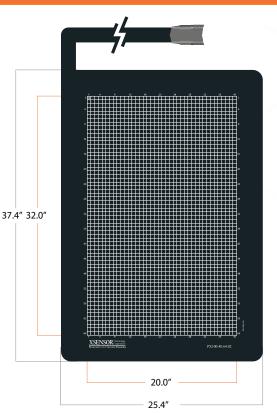
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

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

PHYSICAL CHARACTERISTICS		
Total Area	25.4" × 37.4"	64.5cm x 95.0cm
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)	3.65"	9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
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

LX100:100.160.05



#### **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**

- 3 X3 Pro Sensor Packs
- 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.



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# SENSORS LX100:12.12.05

### PRODUCT DESCRIPTION

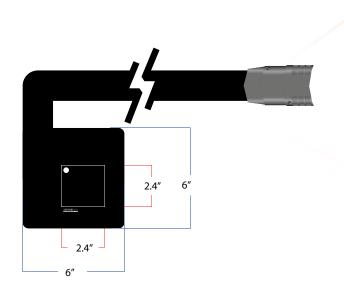
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07–2.7N/cm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	6" x 6"	15.2cm x 15.2cm
Sensing Area	2.4" x 2.4"	6.1cm x 6.1cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.1"	53 cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	43.5" x 2" x 0.16"	110.5cm x 2.5cm 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

#### LX100:12.12.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 144 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.



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#### nbn Austria GmbH

Riesstraße 146, 8010 Graz

# SENSORS LX100:15.30.05

# PRODUCT DESCRIPTION

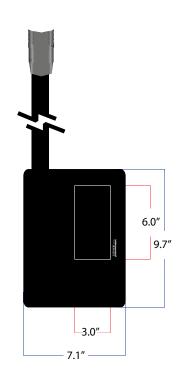
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07 – 2	.7N/cm <sup>2</sup>
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	7.1" × 9.7"	18.0cm x 24.6cm
Sensing Area	3" x 6"	7.6cm x 15.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.2"x2.55"	5.6x6.5cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	43.5" x 2" x 0.5"	110.5cm x 5.1cm x 0.5cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 0.2cm

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

#### LX100:15.30.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08mm pitch (resolution) and 450 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.



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#### nbn Austria GmbH

# SENSORS LX100:15.50.05

# PRODUCT DESCRIPTION

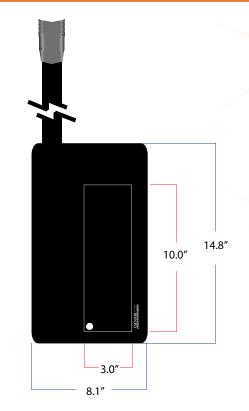
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07 – 2	.7N/cm <sup>2</sup>
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	8.1" × 14.8"	20.6cm x 37.6cm
Sensing Area	3" x 10"	7.6cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.4"x3.3"	6.1x8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
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

# LX100:15.50.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08mm pitch (resolution) and 750 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.



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# SENSORS LX100:25.50.05

# PRODUCT DESCRIPTION

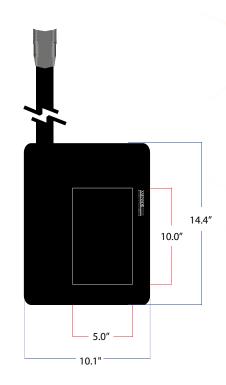
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-3.87psi	
	0.07 – 2	2.7N/cm <sup>2</sup>
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	40 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.1" x 14.4"	25.7cm x 36.6cm
Sensing Area	5" x 10"	12.7cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.7"x3.3"	6.9x8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
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

### LX100:25.50.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 1,250 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.



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# SENSORS LX100:50.50.05

# PRODUCT DESCRIPTION

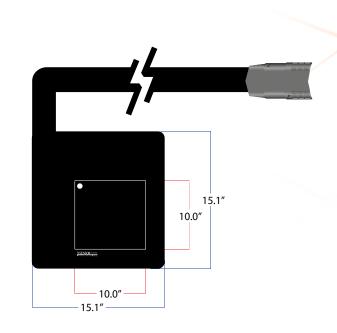
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-3.87psi	
	0.07 – 2.7N/cm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	38 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	15.1" x 15.1"	38.4cm x 38.4cm
Sensing Area	10" x 10"	25.4cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	3.3"	8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
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

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

LX100:50.50.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08mm pitch (resolution) and 2,500 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.



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# SENSORS LX100:10.64.05

### PRODUCT DESCRIPTION

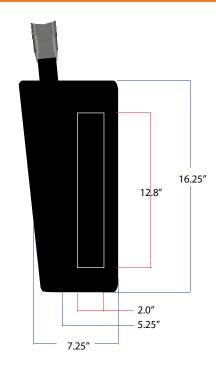
The X3 LX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace seat designs and manufacturing quality. The LX100 series of sensors are highly accurate due to high repeatability,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

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–3.87psi	
	0.07-2.7N/cm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	60 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	7.25" x 16.25"	18.4cm x 41 <i>3</i> cm
Sensing Area	2" x 12.8"	5.08cm x 32.5cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.3"x3.65"	5.8x9.3cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	1.5" x 2" x .07"	3.8cm x 5.1cm x .18cm
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

#### LX100:10.64.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 640 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.



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#### nbn Austria GmbH

# SENSORS LX210:36.36.02

# PRODUCT DESCRIPTION

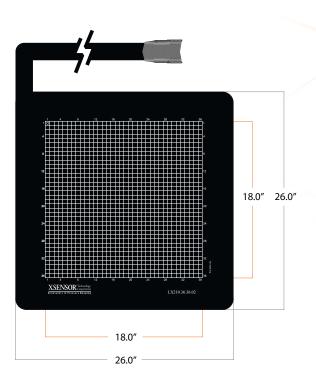
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingressegress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07–10.3N/cm <sup>2</sup>	
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

#### LX210:36.36.02



#### **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.



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#### nbn Austria GmbH

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# SENSORS LX210:40.40.02

# PRODUCT DESCRIPTION

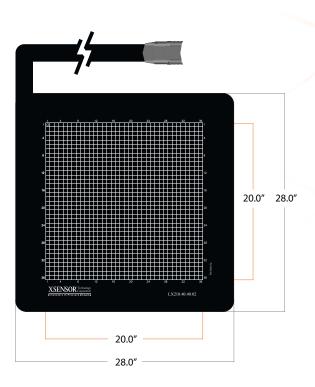
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingressegress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07–10.3N/cm <sup>2</sup>	
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

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

#### LX210:40.40.02



#### **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.



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# SENSORS LX210:48.48.02

# PRODUCT DESCRIPTION

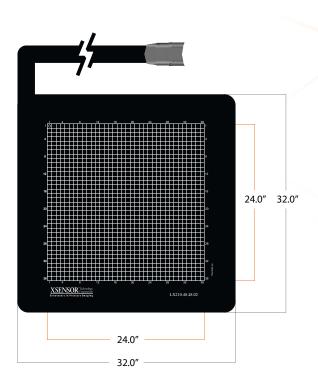
The X3 LX210 replaces the LX200 series. They are designed as a confirmable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingress-egress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1–15psi	
	0.07–10.3N/cm <sup>2</sup>	
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

### LX210:48.48.02



#### **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.



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# SENSORS LX210:40.64.02

# PRODUCT DESCRIPTION

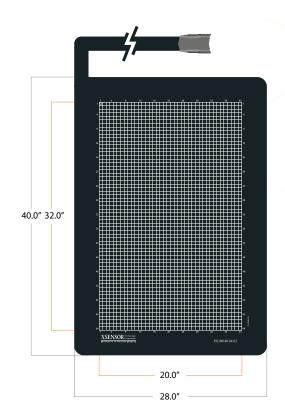
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingress-egress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1–15psi	
	0.07-10.3N/cm <sup>2</sup>	
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

#### LX210:40.64.02



#### **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.



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# SENSORS LX210:12.12.05

# PRODUCT DESCRIPTION

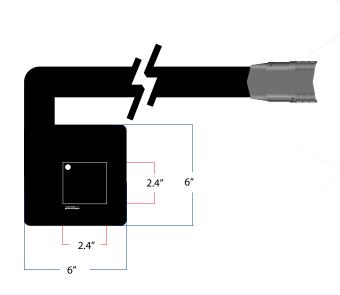
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingressegress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-15psi	
	0.14-11N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	6" x 6"	15.2cm x 15.2cm
Sensing Area	2.4" x 2.4"	6.1cm x 6.1cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.1"	5 <i>3</i> cm
Border Width (non-cabling side)	1.5"	3.8cm
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

#### LX210:12.12.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 144 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.



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#### nbn Austria GmbH

Riesstraße 146, 8010 Graz

# SENSORS LX210:15.30.05

# PRODUCT DESCRIPTION

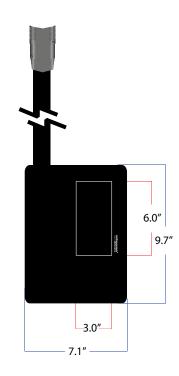
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingressegress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	0.1-15psi	
	0.14-11N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	7.1" × 9.7"	18.0cm x 24.6cm
Sensing Area	3" x 6"	7.6cm x 15.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.2"x2.55"	5.6x6.5cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
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

# LX210:15.30.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch • (resolution) and 450 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.



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# SENSORS LX210:15.50.05

# PRODUCT DESCRIPTION

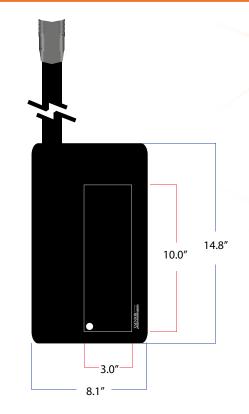
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingressegress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-15psi	
	0.14-11N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	8.1" × 14.8"	20.6cm x 37.6cm
Sensing Area	3" x 10"	7.6cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.4"x3.3"	6.1x8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.09"	12.1cm x 7cm x 2.3cm

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

# LX210:15.50.05



### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch • (resolution) and 750 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.



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# SENSORS LX210:25.50.05

# PRODUCT DESCRIPTION

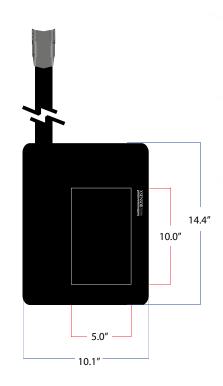
The X3 LX210 replaces the LX200 series. They are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors are ideal for assessing automotive and aerospace ingressegress, seat design, and manufacturing quality. The LX210 series of sensors are highly accurate 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.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-15psi	
	0.14-11N/cm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	40 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.1" x 14.4"	25.7cm x 36.6cm
Sensing Area	5" x 10"	12.7cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.7"x3.3"	6.9x8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.09"	12.1cm x 7cm x 2.3cm

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

# LX210:25.50.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 1,250 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.



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# SENSORS LX210:50.50.05

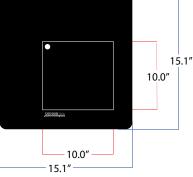
# PRODUCT DESCRIPTION

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 ingressegress, 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.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.1-15psi	
	0.14-11N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	35 frames/s**	

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LX210:50.50.05



PHYSICAL CHARACTERISTICS		
Total Area	15.1" x 15.1"	38.4cm x 38.4cm
Sensing Area	10" x 10"	25.4 x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	3.3"	8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.09"	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 2,500 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.



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# SENSORS LX205:40.40.10

# PRODUCT DESCRIPTION

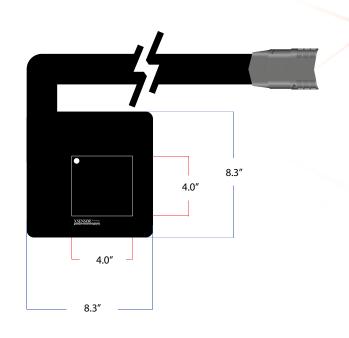
The LX205:40.40.10 is a mid-range pressure sensor with over 1,600 sensing points. The sensor can be used for measuring hand pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The LX205:40.40.10 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-15psi	
	0.14-10.3N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	8.3" ×8.3"	21.1cm x 21.1cm
Sensing Area	4" x 4"	10.2cm x 10.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.08"	0.11cm
Border Width (cabling side)	2.8"	7.1cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	31.5" x 2" x 0.16"	80cm 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

### LX205:40.40.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 1,600 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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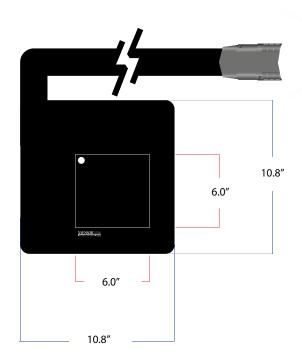
The LX205:60.60.10 is a mid-rangepressure sensor with 3,600 sensing points. The sensor can be used for measuring hand pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The LX205:60.60.10 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-15psi	
	0.14-10.3N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	30 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.8" x 10.8"	27.4cm x 27.4cm
Sensing Area	6" x 6"	15.2cm x 15.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.08"	0.11cm
Border Width (cabling side)	3.3"	8.4cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	31.5" x 2" x 0.16"	80cm 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

### LX205:60.60.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 3,600 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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# SENSORS LX205:25.100.10

# PRODUCT DESCRIPTION

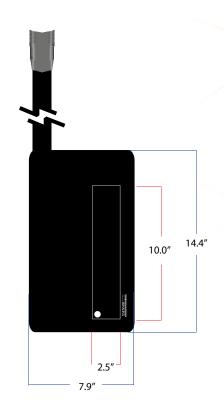
The LX205.100.10 sensor is small, narrow, high resolution sensor. The sensor has been used for assessing applied pressures from fingers, robotic hands, and other low pressure applications. Due to the resolution and the pressure range, the sensor can detect small changes in pressures and provides very clear images.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-15psi	
	0.14-10.3N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	37 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	7.9" x 14.4"	20.1cm x 36.6cm
Sensing Area	2.5" x 10"	6.45cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.1"	0.25cm
Border Width (cabling side)	2.68"x3.65"	6.8x9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	31.5" x 2" x 0.27"	80cm x 5.1cm x 0.7cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7.0cm x 2.3cm

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

# LX205:25.100.10



### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 2,500 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both lab and environmental testing
- Has been used to measure finger pressures

### **REQUIREMENTS FOR OPERATION**

- 2x X3 Pro Sensor Packs
- 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.



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# SENSORS LX205:50.100.10

# PRODUCT DESCRIPTION

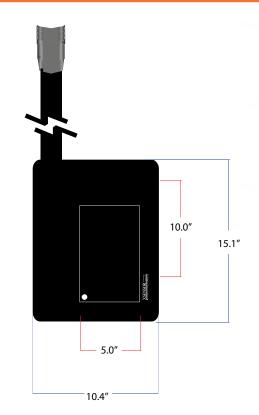
The LX205 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product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

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	0.2-15 psi	
	0.14-10.3N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 10% full scale*	
Sampling Frame Rate	36 frames/s**	

PHYSICAL CHARACTERISTICS			
Total Area	10.4" × 15.1"	26.4cmx38.4cm	
Sensing Area	5" x 10"	12.7cm x 25.4cm	
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm	
Thickness (Border – cabling side)	0.04"	0.11cm	
Border Width (cabling side)	3.3"x3.65"	8.4x9.3cm	
Border Width (non-cabling side)	1.75"	4.4cm	
Cable	31.5" x 2" x 0.27"	80cm x 5.1cm x 0.7cm	
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

# LX205:50.100.10



# KEY FEATURES

- High-resolution sensors with a 2.54 mm pitch (resolution) and 5,000 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both lab and environmental testing

#### **REQUIREMENTS FOR OPERATION**

- 2 X3 Pro Sensor Packs
- 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.



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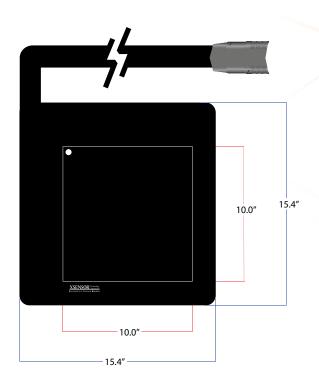
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#### nbn Austria GmbH

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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.

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#### **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**

- 2 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.



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

PHYSICAL CHARACTERISTICS			
Total Area	15.4" x 15.4"	39.1cm x 39.1cm	
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)	3.65"	9.3cm	
Border Width (non-cabling side)	1.75"	44cm	
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

Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.

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The X3 IX500:256.256.22 is a high pressure sensor designed for automotive tire testing. The sensor has a 1.15mm pitch with 65,536 sensing points and is unsurpassed in terms of accuracy and durability. The high resolution provides very clear image quality for tire tread viewing and analysis. The sensor is mounted on a Lexan backing to provide additional durability. The IX500:256.256.22 has been used for both lab and environmental testing.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-300psi	
	3.4-69N/cm <sup>2</sup> 7-207N/cm <sup>2</sup>	
Spatial Resolution	0.045" 1.15mm	
Accuracy	± 10% full scale*	
Sampling Frame Rate	6 frames/s**	

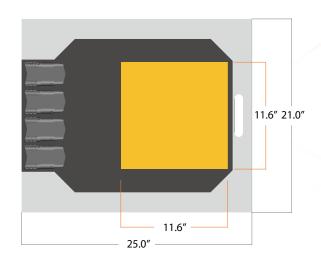
PHYSICAL CHARACTERISTICS		
Total Area	25" x 21"	63.5cm x 53.3cm
Sensing Area	11.6" x 11.6"	29.5cm x 29.5cm
Thickness (Sensing Area, uncompressed)	0.04"	0.1cm
Thickness (Border – cabling side)	0.06"	0. <b>15</b> cm
Border Width (cabling side)	4.75"	12.1cm
Border Width (non-cabling side)	2.63"	6.7cm
Cable	-	-
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

SENSING	
Ambient Temperature	15°C–30°C
Ambient Humidity	5% to 90% RH

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### IX500:256.256.22



#### **KEY FEATURES**

- High-resolution sensors with a 1.15 mm pitch (resolution) and 65,536 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both lab and environmental testing
- Durable sensors that perform well in subsurface (soil/ sand) testing

# **REQUIREMENTS FOR OPERATION**

- 4 X3 Pro Sensor Pack's
- 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.



Innovators in Pressure Imaging



#### nbn Austria GmbH

The X3 IX500:256.256.16 is a truck tire sensor with 65,536 sensing points and unsurpassed accuracy and durability. The sensor has a 1.6mm pitch with 65,536 sensing points and is unrivaled in terms of accuracy and durability. The high resolution provides very clear image quality for tire tread viewing and analysis. The sensor is mounted on a Lexan backing to provide additional durability.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-300psi	
	3.4-69N/cm <sup>2</sup> 7-207N/cm <sup>2</sup>	
Spatial Resolution	0.063" 1.6mm	
Accuracy	± 10% full scale*	
Sampling Frame Rate	6 frames/s**	

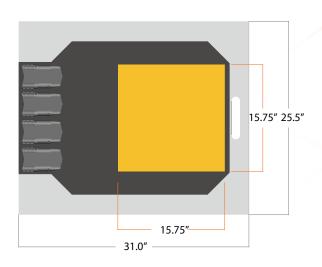
PHYSICAL CHARACTERISTICS		
Total Area	25.5" x 31"	64.8cm x 78.7cm
Sensing Area	15.75" x 15.75"	40 cm x 40 cm
Thickness (Sensing Area, uncompressed)	0. <b>04</b> "	0.1cm
Thickness (Border – cabling side)	0.06"	0. <b>15</b> cm
Border Width (cabling side)	4.75"	12.1 cm
Border Width (non-cabling side)	0.4"	1cm
Cable	-	-
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

SENSING	
Ambient Temperature	15°C-30°C
Ambient Humidity	5% to 90% RH

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### IX500:256.256.16



#### **KEY FEATURES**

- High-resolution sensors with a 1.6 mm pitch (resolution) and 65,536 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both lab and environmental testing
- Durable sensors that perform well in subsurface (soil/ sand) testing

### **REQUIREMENTS FOR OPERATION**

- 4 X3 Pro Sensor Pack's
- 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.



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The X3 IX500:192.192.05 is the newest addition to the tire sensor family. This sensor has been designed to test large agriculture tires and mining tires with very large tread patterns.

The sensor is mounted onto a supporting sheet of Lexan for additional durability and has a durable urethane cover material for protection from sands and soils. The sensor is supplied with sheer-reducing layers which are laid over the sensor to reduce or eliminate sheer forces. The IX500:192.192.05 is used in lab and outdoor settings, including subsoil testing for tread impact.

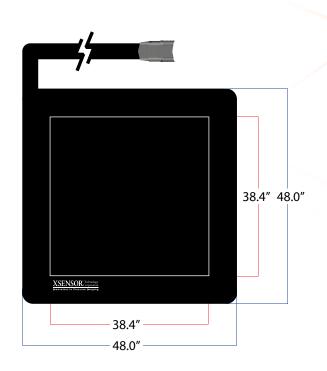
#### SENSING

Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-300psi	
	7–207N/cm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 10% full scale*	
Sampling Frame Rate	10 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	48" x 48"	121.9cm x 121.9cm
Sensing Area	38.4" x 38.4"	97.5cm x 97.5cm
Thickness (Sensing Area, uncompressed)	0.05"	0.1 <b>3</b> cm
Thickness (Border – cabling side)	0.09"	0.23cm
Border Width (cabling side)	5.6"	14.2cm
Border Width (non-cabling side)	4"	10. <b>2</b> cm
Cable	43.5" x 2" x 0.5"	110.5cm x 5.1cm x 1. <b>3</b> cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

SENSING	
Ambient Temperature	15°C-30°C
Ambient Humidity	5% to 90% RH

### IX500:192.192.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 36,864 sensing points
- Designed for large industrial tire testing
- Excellent for both lab and environmental testing
- Durable sensors that performs well in subsurface (soil/ sand) testing
- Sensor is mounted on a Lexan backing for added durability

# REQUIREMENTS FOR OPERATION

- 3 X3 Pro Sensor Packs
- 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.



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# SENSORS IX510:128.128.10

# PRODUCT DESCRIPTION

The X3 IX510:128.128.10 is a high pressure sensor with 16,384 sensing points. The sensor has been designed with a tough urethane cover that can withstand outdoor testing for tire applications. The sensor is bendable and can conform to different surfaces. The IX510:128.128.10 provides a combination of higher resolution and faster data acquisition rates so that it can be used in low speed dynamic tire testing.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-512psi	
	689N/cm <sup>2</sup> - 353 n/cm <sup>2</sup>	
Spatial Resolution	0.1" 2.54mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	16 frames/s**	

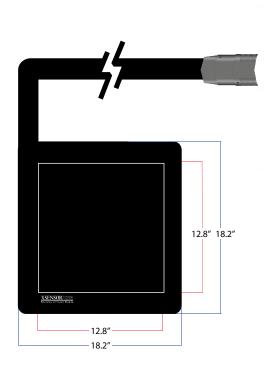
PHYSICAL CHARACTERISTICS		
Total Area	18.2" × 18.2"	46.2cm x 46.2cm
Sensing Area	12.8" x 12.8	32.5cm x 32.5cm
Thickness (Sensing Area, uncompressed)	0.04"	0.11cm
Thickness (Border – cabling side)	0.05"	0.13cm
Border Width (cabling side)	3.65"	9.3cm
Border Width (non-cabling side)	1.75"	44cm
Cable	31.5" x 2" x 0.31"	80cm 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	15°C-30°C
Ambient Humidity	5% to 90% RH

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### IX510:128.128.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54mm pitch (resolution) and 16,384 sensing points
- Designed for large industrial tire testing
- Excellent for both lab and environmental testing
- Durable sensors that performs well in subsurface (soil/ sand) testing
- Sensor is mounted on a Lexan backing for added durability

# REQUIREMENTS FOR OPERATION

- 2 X3 Pro Sensor Packs
- 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.



Innovators in Pressure Imaging



#### nbn Austria GmbH

# SENSORS IX510:128.128.05

# PRODUCT DESCRIPTION

The X3 IX510:128.128.05 is a high pressure sensor with 16,384 sensing points. The sensor has been designed with a tough urethane cover that can withstand outdoor testing for tire applications. The sensor is bendable and can conform to different surfaces. The IX510:128.128.05 provides a combination of higher resolution and faster data acquisition rates so that it can be used in low speed dynamic tire testing.

SENSING		
Sensor Technology	Capacitive Pre	ssure Imaging
Pressure Range	10-51	2psi
	6.9-35	3N/cm <sup>2</sup>
Spatial Resolution	0.2"	5.08 mm
Accuracy	$\pm$ 5% full scale*	
Sampling Frame Rate	16 fran	nes/s**

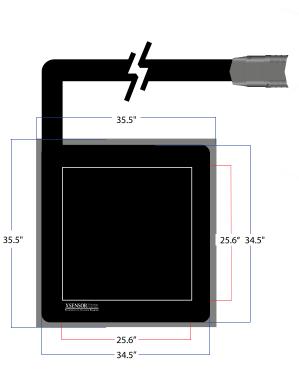
PHYSICAL CHARACTERISTICS		
Total Area	34.5" x 34.5"	87.6cm x 87.6cm
Sensing Area	25.6" x 25.6"	65cm x 65cm
Thickness (Sensing Area, uncompressed)	0.04"	0.11cm
Thickness (Border – cabling side)	0.06"	0.15cm
Border Width (cabling side)	5.38"	13.7cm
Border Width (non-cabling side)	3.5"	8.9cm
Cable	43.5" x 2" x 0.31"	110cm 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	15°C-30°C
Ambient Humidity	5% to 90% RH

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#### IX510:128.128.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08mm pitch (resolution) and 16,384 sensing points
- Designed for large industrial tire testing
- Excellent for both lab and environmental testing
- Durable sensors that performs well in subsurface (soil/ sand) testing
- Sensor is mounted on a Lexan backing for added durability

### **REQUIREMENTS FOR OPERATION**

- 2 X3 Pro Sensor Packs
- 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.



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# SENSORS IX510:40.40.10

# PRODUCT DESCRIPTION

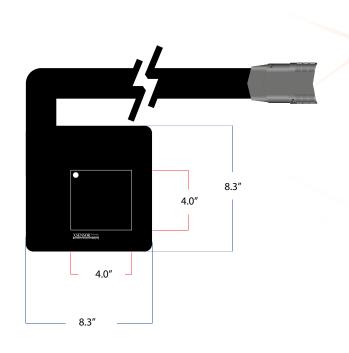
The X3 IX510:40.40.10 is a high pressure sensor with over 16,000 sensing points. The sensor can be used for measuring hand pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The IX510:40.40.10 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	10-512psi	
	6.9-353N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	39 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	8.3" x8.3"	21.1cm x 21.1cm
Sensing Area	4" x 4"	10.2cm x 10.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.08"	0.11cm
Border Width (cabling side)	2.8"	7.1cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	31.5" x 2" x 0.16"	80cm 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

### IX510:40.40.10



#### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 1,600 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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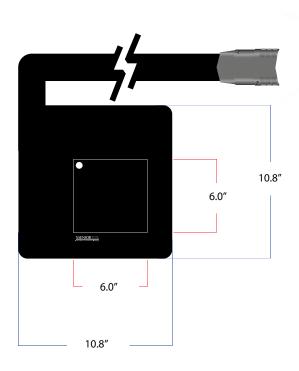
The X3 IX510:60.60.10 is a high pressure sensor with 3,600 sensing points. The sensor can be used for measuring hand pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The IX510:60.60.10 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	10-512psi	
	6.9-353N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	30 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.8" x 10.8"	27.4cm x 27.4cm
Sensing Area	6" x 6"	15.2cm x 15.2cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.08"	0.11cm
Border Width (cabling side)	3.3"	8.4cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	31.5" x 2" x 0.16"	80cm x 5.1cm x 0.4cm
Connector	4.76" x 2.76" x 0.9"	12.1cm x 7cm x 2.3cm

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

### IX510:60.60.10



# **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 3,600 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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# SENSORS IX510:50.100.10

# PRODUCT DESCRIPTION

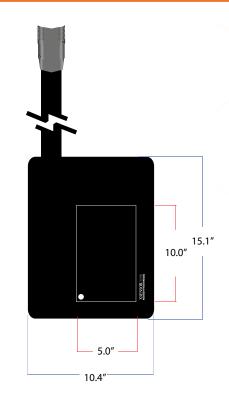
The IX510:50.100.10 sensor is a medium sized high resolution sensor. The sensor has been used for assessing applied pressures from fingers, robotic hands, and other low pressure applications. Due to the resolution and the pressure range, the sensor can detect small changes in pressures and provides very clear images.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	10-5	12psi
	6.9-353N/cm <sup>2</sup>	
Spatial Resolution	0.1"	2.54mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	37 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.4" × 15.1"	26.4cmx38.4cm
Sensing Area	5" x 10"	12.7cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.035"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	3.3"x3.65"	8.4x9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	31.5" x 2" x 0.31"	80cm 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

## IX510:50.100.10



### **KEY FEATURES**

- High-resolution sensors with a 2.54 mm pitch (resolution) and 5,000 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both lab and environmental testing
- Durable sensors that performs well in subsurface (soil/sand) testing

# REQUIREMENTS FOR OPERATION

- 2 X3 Pro Sensor Packs
- 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.



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# SENSORS IX510:100.100.10

# PRODUCT DESCRIPTION

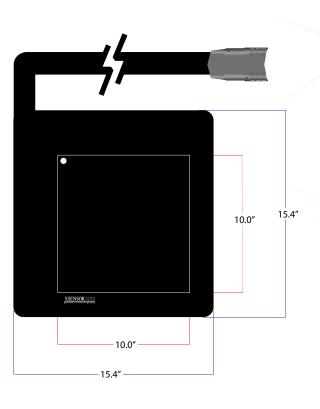
The IX510:100.100.10 sensor is a medium sized high resolution sensor. The sensor has been used for assessing applied pressures from fingers, robotic hands, and other low pressure applications. Due to the resolution and the pressure range, the sensor can detect small changes in pressures and provides very clear images.

IX510:100.100.10
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SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	10-512psi	
	6.9-353N/cm <sup>2</sup>	
Spatial Resolution	0.1" 2.54mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	14 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	15.4" x 15.4"	39.1cm x 39.1cm
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)	3.65"	9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	31.5" x 2" x 0.31"	80cm 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 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**

- 2 X3 Pro Sensor Packs
- 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.



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# SENSORS IX510:64.64.04

# PRODUCT DESCRIPTION

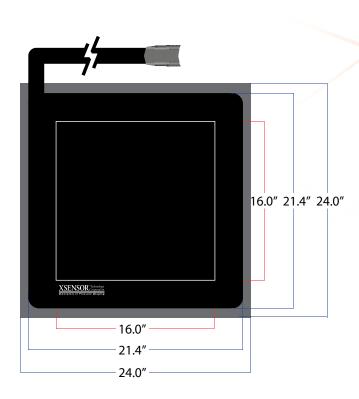
The IX510:64.64.04 is a stance pad sensor that comes with a Lexan backing.. The sensor has been designed to measure standing and striding foot pressures. A durable urethane cover provides extra protection and durability for heel strike and running movements. The sensor provides a high frame rate for recording foot movements. The IX510:64.64.04 generates foot profiles and analyzes foot pressures from standing, to walking, to running.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	1-100 psi	
	0.67-68N/cm <sup>2</sup>	
Spatial Resolution	0.25" 6.35mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	24 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	21.4" × 21.4"	54.4cm x 54.4cm
Sensing Area	16" x 16"	40.6cm x 40.6cm
Thickness (Sensing Area, uncompressed)	0.05"	0.13cm
Thickness (Border – cabling side)	0.063"	0.16cm
Border Width (cabling side)	3.65"	9.3cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	26.5" x 2" x 0.16"	118cm 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

# IX510:64.64.04



### **KEY FEATURES**

- High-resolution sensors with a 6.35mm pitch (resolution) and 4,096 sensing points
- Designed for high-quality pressure images with exceptional detail
- Excellent for both clinical and dynamic testing
- Durable sensor that is portable with plug and play functionality

# **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.



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# SENSORS IX510:12.12.05

# PRODUCT DESCRIPTION

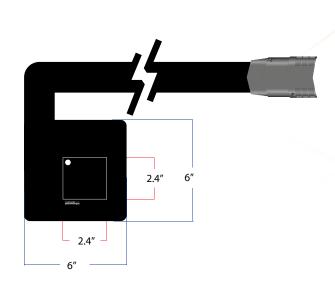
The IX510:12.12.05 is a high pressure sensor with 144 sensing points. The sensor can be used for measuring tactile pressures on surfaces and for higher pressure research or design testing. The IX510:12.12.05 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	10-512psi	
	6.9-353N/cm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	6" x 6"	15.2cm x 15.2cm
Sensing Area	2.4" x 2.4"	6.1cm x 6.1cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.1"	5 <i>3</i> cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	46.5" x 1" x 0.16"	118cm x 2.5cm x 0.4cm
Connector	4.76" x 2.76" x 0.09"	12.1cm x 7cm x 2.3cm

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

# IX510:12.12.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 144 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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# SENSORS IX510:15.30.05

# PRODUCT DESCRIPTION

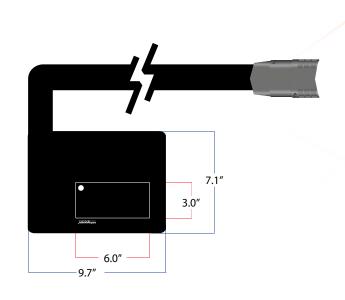
The IX510:15.30.05 is a high pressure sensor with 450 sensing points. The sensor can be used for measuring tactile pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The IX510:15.30.05 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pre	essure Imaging
Pressure Range	10-512psi	
	6.9-353Ncm <sup>2</sup>	
Spatial Resolution	0.2" 5.08mm	
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	7.1" × 9.7"	18.0cm x 24.6cm
Sensing Area	3" x 6"	7.6cm x 15.2cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.2"x2.55"	5.6x6.5cm
Border Width (non-cabling side)	1.5"	3.8cm
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

# IX510:15.30.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 450 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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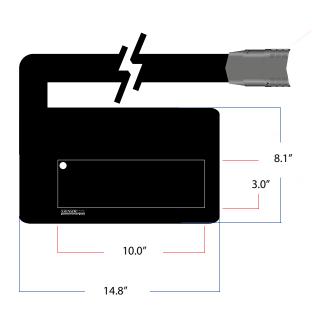
The IX510:15.50.05 is a high pressure sensor with 750 sensing points. The sensor can be used for measuring tactile pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The IX510:15.50.05 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-512psi	
	6.9-353Ncm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	95 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	8.1" × 14.8"	20.6cm x 37.6cm
Sensing Area	3" x 10"	7.6cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.4"x3.3"	6.1x8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
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

# SENSINGAmbient Temperature10°C-40°CAmbient Humidity5% to 90% RH

## IX510:15.50.05



### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 750 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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# SENSORS IX510:25.50.05

# PRODUCT DESCRIPTION

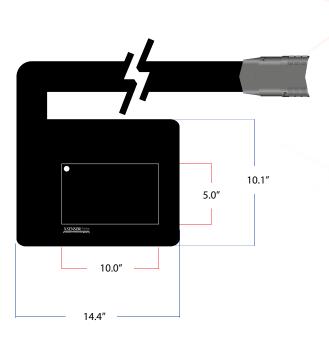
The IX510:15.25.50.05 is a high pressure sensor with 1,250 sensing points. The sensor can be used for measuring tactile pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The IX510:15.30.05 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-512psi	
	6.9-35	3Ncm <sup>2</sup>
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	40 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	10.1" x 14.4"	25.7cm x 36.6cm
Sensing Area	5" x 10"	12.7cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.07"	0.18cm
Border Width (cabling side)	2.7"x3.3"	6.9x8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
Cable	43.5" x 2" x 0.16"	110.5cm x 5.1cm x 0.04cm
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

### IX510:25.50.05



### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 1,250 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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# SENSORS IX510:50.50.05

# PRODUCT DESCRIPTION

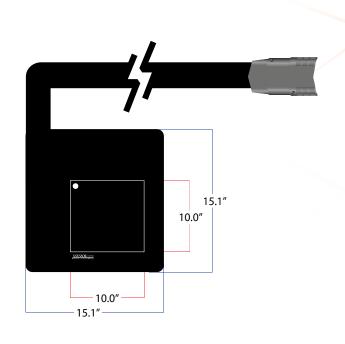
The IX510:50.50.05 is a high pressure sensor with 2,500 sensing points. The sensor can be used for measuring tactile pressures on surfaces, automated clamping pressures, seal pressures, and for higher pressure research or design testing. The IX510:50.50.05 is a thin and conformable sensor that can fit into tight spaces and can be used on uneven surfaces. Additionally, the sensor provides a very fast data acquisition rate for capturing rapid movements.

SENSING		
Sensor Technology	Capacitive Pressure Imaging	
Pressure Range	10-512psi	
	6.9-353N/cm <sup>2</sup>	
Spatial Resolution	0.2"	5.08mm
Accuracy	± 5% full scale*	
Sampling Frame Rate	36 frames/s**	

PHYSICAL CHARACTERISTICS		
Total Area	15.1" x 15.1"	38.4cm x 38.4cm
Sensing Area	10" x 10"	25.4cm x 25.4cm
Thickness (Sensing Area, uncompressed)	0.03"	0.09cm
Thickness (Border – cabling side)	0.04"	0.11cm
Border Width (cabling side)	3.3"	8.4cm
Border Width (non-cabling side)	1.75"	4.4cm
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

## IX510:50.50.05



#### **KEY FEATURES**

- High-resolution sensors with a 5.08 mm pitch (resolution) and 2,500 sensing points
- Designed for high-quality pressure images with fast data acquisition
- Excellent for both lab and environmental testing
- Conformable sensor that can measure pressures on uneven 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.



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# SENSORS IX510:3.64.05-10

#### IX510:3.64.05-10

# **PRODUCT DESCRIPTION**

The IX510.3.64.05-10 has been designed for use as a car and truck tire bead sensor. With a silicon based lubricant the sensor is placed between the bead on the tire rim and the tire. The sensor provides real-time pressure readings for both the heel and toe of the bead. The sensor is calibrated and designed to withstand multiple uses. This sensor can also be used to test high pressure applications for rollers or presses.

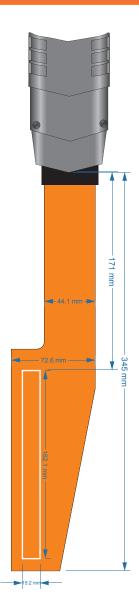
SENSOR SPECIFICATIONS		
Overall Dimensions (not including cabling)	73mm x 345mm	
Sensing Area Dimensions	15mm x 162mm	
Sensor Cell Resolution	5.08mm x 2.54 mm	

Border Thickness	.75mm +/1mm
Sensing Area & Surrounding Thickness	1mm +/1mm
Cable Thickness	.75mm +/1mm

Sensor Cover Material	Copper
Sensor Area Markings	Outline only

Cable Dimensions	17mm x 44mm x .7mm
Connector Dimensions (Each Connector)	121mm x 70mm x 23mm

Pressure Range	10-512 psi - Extrapolates to 1024	
Calibration Accuracy	+/- 5% FS	





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# SOFTWARE

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# SOFTWARE PRO V8

### PRODUCT DESCRIPTION

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

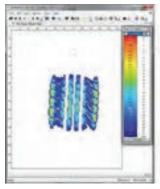
#### **Imaging Tools**

- 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

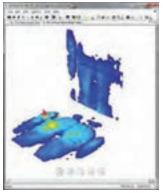
#### Export/Analysis Tools

- 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.

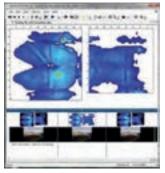
## PRO V8 Software



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)



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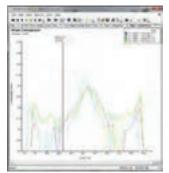
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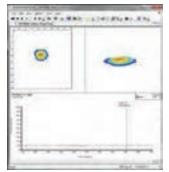
# SOFTWARE PRO V8

# 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.

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# XSENSOR<sup>®</sup> Pro Ressure 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

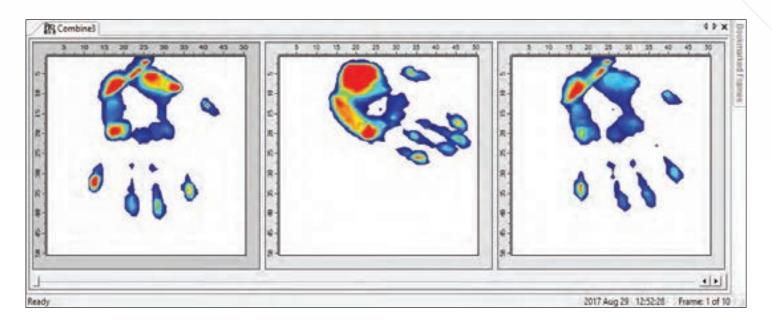
# WHAT'S NEW IN VERSION 8?

## 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.





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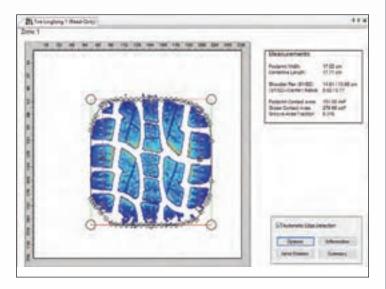
# XSENSOR<sup>®</sup> Prove pressure imaging software

# 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

For more information, contact us at:

XSENSOR Technology Corporation 133 12 Avenue SE Calgary, Alberta T2G 0Z9 Canada

North America 403-266-6612 1-866-927-5222



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www.xsensor.com

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# ELECTRONICS

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# ELECTRONICS X3 PRO Platform | X3 PRO Sensor Pack

# X3 PRO Platform





#### 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	256	6x256	
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		x64
Sampling Rate	112,000 s	ensels/sec
Sampling Resolution	16	bit
Min Cell Measurement Time	35 μ	ISEC
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	



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# ELECTRONICS X3 Node | X3 Accessories Cable





#### 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	0 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		



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# ELECTRONICS X3 Power Supply | X3 Battery Pack

# 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	n-ion Recharger	
Run Time	5 hc	ours	
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		



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# ACCESSORIES X3 Carry Case

# 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 CHARACTERISTICSLength33"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			



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# ACCESSORIES X3 Carry Case - Tire Sensor

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



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