

SENSORS **PX100:48.144.02**

PRODUCT DESCRIPTION

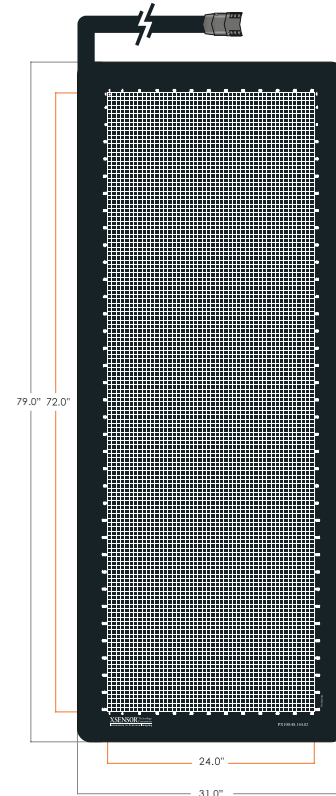
The X3 PX100 series of sensors are designed as a conformable and durable sensor for measuring interface pressures. These capacitive sensors were initially designed for medical applications in rehabilitation seating and have since been more widely used in automotive seating, aerospace, research, and product design. The PX100 series of sensors are known for accuracy, durability, and repeatability. The PX100:48.144.02 sensor is primarily used for pressure mapping hospital beds and mattresses.

SENSING	
Sensor Technology	Capacitive Pressure Imaging
Pressure Range	0.1–1.0psi 0.2–3.87psi
	0.07–0.69N/cm ² , 0.14–2.7N/cm ²
Spatial Resolution	0.5" 12.7mm
Accuracy	± 10% full scale*
Sampling Frame Rate	23 frames/s**

PHYSICAL CHARACTERISTICS		
Total Area	31" x 79"	78.7cm x 200.7cm
Sensing Area	24" x 72"	60.9cm x 182.9cm
Thickness (Sensing Area, uncompressed)	0.03"	0.08cm
Thickness (Border – cabling side)	0.04"	0.1cm
Border Width (cabling side)	5"	12.7cm
Border Width (non-cabling side)	2"	5.1cm
Cable	46.4" x 2" x 0.5"	118cm x 5.1cm x 1.2cm
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

PX100:48.144.02



KEY FEATURES

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

REQUIREMENTS FOR OPERATION

- Each PX100:48.144.02 sensor must be connected to three X3 PRO SENSOR PACKs
- The X3 PRO SENSOR PACKs need to be connected to an X3 PRO
- The X3 PRO needs to be connected to a power supply and a computer running XSENSOR software to function

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