# SENSORS **PX100:10.160.05**

## PRODUCT DESCRIPTION

The X3 PX100:10.160.05 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 Pressure 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 37"	22.2cm x 94cm
Sensing Area	32" x 1.0"	81.3cm x 2.54cm
Thickness (Sensing Area, uncompressed)	0.024"	0.06cm
Thickness (Border – cabling side)	0.04"	0.1cm
Border Width (cabling side)	6.25"	15.9cm
Border Width (non-cabling side)	1.5"	3.8cm
Cable	42" x 2" x 0.5"	106cm x 5.08cm x 1.27cm
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	

#### PX100:10.160.05



#### **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**

- Each PX100:10.160.05 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.

