

# SENSORS PX100:10.64.02

## PRODUCT DESCRIPTION

The X3 PX100:10.64.02 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.

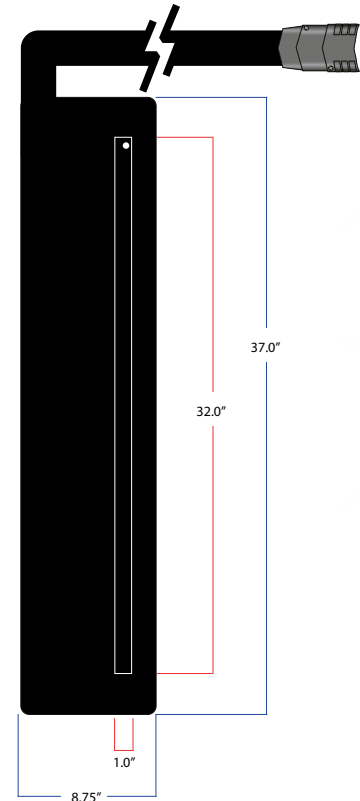
The sensor design is based on industry needs for assessing and comparing different wiper blade profiles and different wiper blade designs. The sensor can be mounted onto a test bench or taped onto a windshield. Wiper blades are then moved onto the sensor area and a repeatable and consistent pressure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

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

| PHYSICAL CHARACTERISTICS  |                      |                        |
|---|----------------------|------------------------|
| <b>Total Area</b>   | 8.75" x 37"          | 22.2cm x 92.7cm        |
| <b>Sensing Area</b>   | 32" x 1.0"           | 81.3cm x 2.54cm        |
| <b>Thickness</b><br><small>(Sensing Area, uncompressed)</small> | 0.03"                | 0.08cm                 |
| <b>Thickness</b><br><small>(Border – cabling side)</small>      | 0.04"                | 0.1cm                  |
| <b>Border Width</b><br><small>(cabling side)</small>            | 6.25"                | 15.9cm                 |
| <b>Border Width</b><br><small>(non-cabling side)</small>        | 1.5"                 | 3.8cm                  |
| <b>Cable</b>  | 46.5" x 2" x 0.16"   | 118cm x 5.1cm x 0.4cm  |
| <b>Connector</b>  | 4.76" x 2.76" x 0.9" | 12.1cm x 7.0cm x 2.3cm |

| SENSING                    |              |
|----------------------------|--------------|
| <b>Ambient Temperature</b> | 10°C–40°C    |
| <b>Ambient Humidity</b>    | 5% to 90% RH |

## PX100:10.64.02



## 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

- Each PX100:10.64.02 sensor must be connected to one X3 PRO SENSOR PACK
- The X3 PRO SENSOR PACK needs to be connected to an X3 PRO
- The X3 PRO needs to be connected to a power supply and a computer running XSENSOR software to function

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