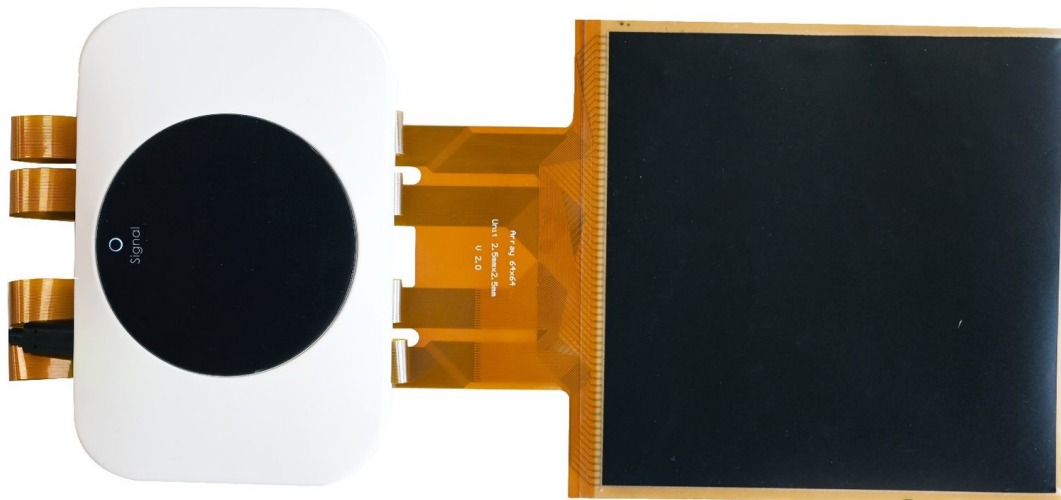


4096-point sensing film

Piezoresistive sensing film and multi-channel acquisition system for large-area surface pressure mapping. Built for wind turbine blade sections, tooling and press platens. Configurations cover up to 1040 x 2480 mm.



1. Sensing film · PD-FS

A piezoresistive film with a 64 × 64 sensing matrix on a 490 × 520 mm sheet. Each sheet is an independent measuring unit; multiple sheets tile to cover larger surfaces while remaining individually replaceable.

Sensing principle	Piezoresistive
Thickness	0.3 mm
Pressure range	400-6000 kPa (customizable)
Sheet size	490 × 520 mm (active 487 × 517 mm)
Sensing points	4096 (64 × 64)
Spatial resolution	7.6 × 8.1 mm
Accuracy	±5% FS
Repeatability	±5% FS
Response time	< 1 ms
Durability	> 10,000 cycles
Sealing zone	1.5 mm per side; 3 mm at combined seams
Cable length	300 mm standard, extendable to 500 mm

Features. 0.3 mm, conforms to curved surfaces; 4096 points per sheet, tiled to any area; Individual sheets replaceable without rebuilding the panel; Range, size and seam layout customizable.

2. Software · PD-SOFT

The bundled application merges every collector into a single pressure map, with recording, playback and raw data export.

Platform	Windows desktop application
Input	Multiple collectors via docking hub
Display	Merged pressure map, single session
Recording	Playback and frame-by-frame export
Data export	Raw values to CSV
Calibration	Per-sheet values stored with the project

3. Data acquisition · PXS series

Each collector drives one 4096-point sensing area. Units are grouped through a docking hub and connected to a single PC, so a tiled surface still reads as one continuous pressure map.

PXS064mini

Model	PXS064mini
Dimensions	90 × 40 mm
Weight	< 100 g
Sampling rate	20 Hz
Resolution	12 bit
Interface	USB
Input voltage	220 V AC
Operating voltage	12 V DC
Operating temperature	-30 to 70 °C
Operating humidity	10-90% RH
Channel coverage	One 4096-point sensing area

PXS128

Model	PXS128
Dimensions	180 × 180 mm
Weight	< 200 g
Sampling rate	20 Hz
Resolution	12 bit
Interface	USB
Input voltage	220 V AC
Operating voltage	12 V DC
Operating temperature	-30 to 70 °C
Operating humidity	10-90% RH
Channel coverage	One 4096-point sensing area

4. Standard configurations

All three cover the same 1040 × 2480 mm surface; they differ in how the area is divided, and so in the collectors, cables and spares to manage.

Configuration	Sensing film	Collectors	Points	Measured area
CONFIG A	10 × 490 × 520 mm	10 × PXS064mini	40,960	1040 × 2480 mm
CONFIG B	5 × 490 × 1040 mm (active 487 × 1034 mm)	10 × PXS064mini (two per long sheet)	20,480	1040 × 2480 mm
CONFIG C	5 × 490 × 1040 mm (active 487 × 1034 mm)	5 × PXS128 (one per long sheet)	20,480	1040 × 2480 mm

5. Ordering and support

Configurations are quoted per project: send the measured area, peak pressure, required resolution and whether the surface is static or moving, and we return a bill of materials with lead time. Prices are not published because film size, sheet count and collectors vary per application. Film samples are available for evaluation. Values are typical; tolerances are confirmed on the order acknowledgement.

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