



Innovative

Solutions in Touch Screen Technology

Projected Capacitive Touch Screen Sensors

Compatible with Standard and ARGON PCAP controllers

Key Features

- ◆ Projected Capacitive (PCAP)
- ◆ 5" to 42" Sensors
- ◆ Glass-Glass Construction
- ◆ Excellent Optical Clarity
- ◆ Scratch-Resistant
- ◆ Water & Chemical Resistant
- ◆ Light Finger and Glove Operation
- ◆ With 'ARGON' controller automatically adapts to sensors from 6" to 24"
- ◆ Broad OS Compatibility
- ◆ 1, 2, 5 or 10-Point Multi-touch
- ◆ USB (HID), or I2C interfaces
- ◆ USB security filtering
- ◆ No tuning software needed
- ◆ Reduced NRE & Inventory
- ◆ Accelerated Time to Market
- ◆ Compatible with A D Metro's Standard and ARGON PCAP controllers

Applications

- ◆ Interactive Digital Signage
- ◆ Kiosks
- ◆ Industrial Control Panels
- ◆ Monitors

A D Metro's quality Projected Capacitive (PCAP) touch sensors are available off-the-shelf in a wide range of sizes, formats and cover glasses.

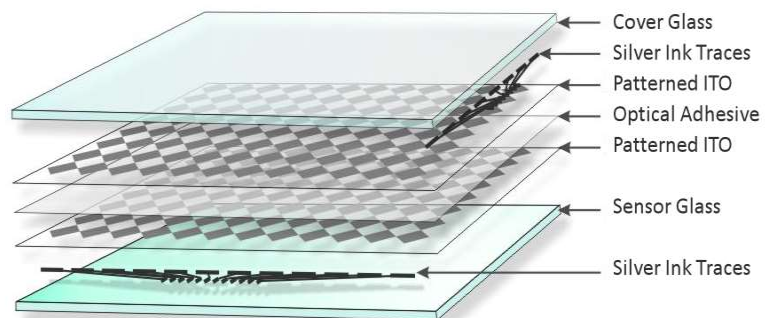
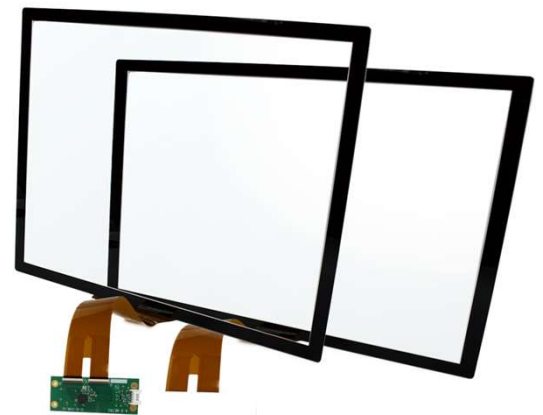
These touch screen sensors conveniently deliver high performance at low cost to original equipment manufacturers and system integrators aiming to deliver multi-touch behavior into control panel, interactive digital signage, and kiosk applications.

The demand for robust multi-touch and gesture control has never been higher. Users now have expectations of such features in commercial applications. These PCAP sensors allow Developers to create rich and sophisticated user interfaces.

A D Metro touch sensors are compatible with a variety of PCAP touch controllers including both A D Metro's Standard PCAP controller and A D Metro's patented, adaptive 'ARGON' PCAP controller. Choosing the ARGON controller can eliminate weeks or months of touch parameter refinement that can delay product integration when a conventional (non-adaptive) controller is used.

A D Metro touch panels offer a quality glass-on-glass sensor with excellent optical clarity.

Custom sensor sizes with additional features such as customer logos or special coatings are supported.



Projected Capacitive Touch Screen Sensors

Specifications when combined with A D Metro controller

Sensor Mechanical Specifications

Detection Type Projected Capacitive
 Screen Tempered glass screen
 Cover Glass Hardness ≥ 6.5 Mohs
 Indium Tin Oxide (ITO)-coated Sensor Glass Thickness 3.3mm
 Light Transmission [Clear] $\geq 85\%$
 Light Transmission [Anti-Glare Coated] $\geq 90\%$
 Sealing Compatibility DO-160, NEMA 4, 12; IP65
 Sensor Lifespan No sensing contacts to wear out

Available Sensor Sizes

With ARGON Controller.....6" to 24"
 With other A D Metro Controllers 5" to 42"
 Custom Sizes & Aspect Ratios Contact A D Metro
 Refer to sensor Drawings for detailed dimensions
 See PCAP SENSOR CATALOG at www.admetro.com

Sensor Environmental Specifications

Operating Temperature -10°C to $+60^{\circ}\text{C}$, $\leq 90\%$ RH
 Storage Temperature -10°C to $+65^{\circ}\text{C}$, $\leq 90\%$ RH
 Chemical Resistance ATSM-D-1308 and ASTM-F-1598-95
 Electromagnetic immunity..... FCC class B

Available Sensor Enhancements

Cover Glass Thickness 0.7, 1.1, 2.0, 3.0, 4.0mm
 Sensor Glass Thickness 0.7, 1.1mm
 Chemically Strengthened Glass
 Custom Cover Glass Logos and Legends

Regulatory

CE/FCC Part 15 Class B Unintentional Radiation * ... Compliant
 UL/MIL RF Immunity $>10\text{V/m}$ * Yes
 RoHS3 Compliant
 REACH Unaffected

* - When used with an A D Metro controller



WARNING: These sensors can expose you to chemicals including Indium Tin Oxide which is known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov.

Compatible Controller Specifications

ARGON Controller Part Number CCA-05-102WL-01
 Standard Controller Part Number CC-02-102WL-03
 USB-A controller cable, 2m Part Number 10-CARU-EXT
 Operating Temperature -40°C to $+85^{\circ}\text{C}$
 Storage Temperature -40°C to $+110^{\circ}\text{C}$
 Relative Humidity 5% to 90% non-condensing
 Physical Dimensions 75mm x 30mm x 8.3mm
 ARGON Controller Firmware (FW).. Universal, Pre-programmed
 Standard Controller FW Options.. Size, orientation & sensitivity

Interfaces

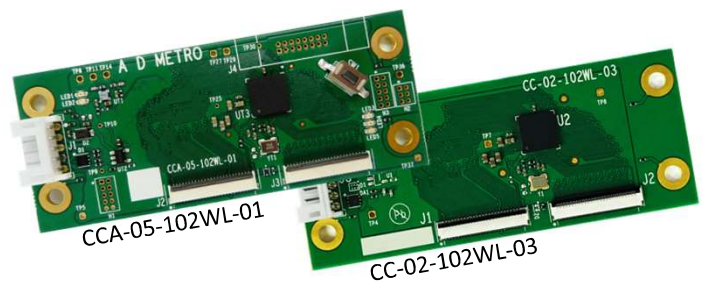
Sensor Interface 2 * 51 FPC
 adapters available for 68pin FPC and others
 Host Interface USB 2.0, I²C, (3.3V-RS232 option)
 Powering Standard USB
 Typical Controller Current Consumption 180 or 100 mA

Operating System Compatibility

OS built in driver operation (USB2 HID compliant):
 Windows 11, 10, 8.1, 7; Windows CE Embedded
 Ubuntu and other Linux

Touch Performance

Input..... Finger-Tips
 Touch Force 0g
 Max Concurrent Touches Configurable 1, 2, 5 or 10
 Touch Refresh Rate $>100\text{Hz}$
 Response Time $<25\text{ms}$
 EMC Margin Testing Built in capability
 Orientation Learned during sensor adaption
 Maximum Glove Thickness up to $>4\text{mm}$



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Disclaimer: Technical specifications are provided for guidance and subject to change without notice. Specifications and performance may depend on sensor dimensions, selected options, installation and mounting. Please contact A D Metro for confirmation of the applicable specifications, individual sensor drawings, as well as installation and mounting best practices.

ABOUT US:

Established in 1988, A D Metro designs, manufactures and supplies innovative touch screen technology solutions for original equipment manufacturers (OEMs), system integrators and value added resellers. Everyday A D Metro's products are touched by millions of people around the world. Our ULTRA product line is the most durable resistive touch screen sensor available on the market and our projected capacitive (PCAP) touch screen solutions simplify design and accelerate time to market.

Contact us, for more information on our innovative touch screen products, enhancements and custom manufacturing solutions.