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

♦ Also compatible with A D Metro's Standard PCAP controller

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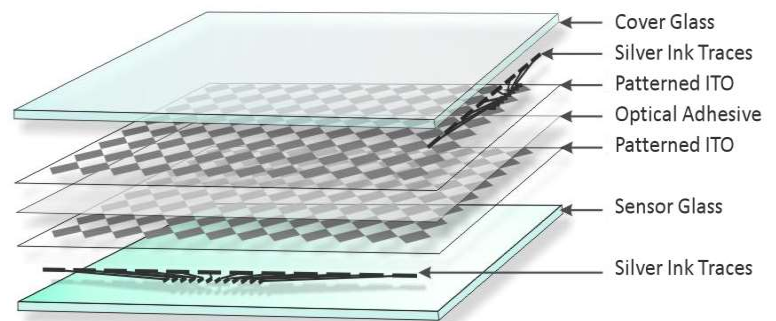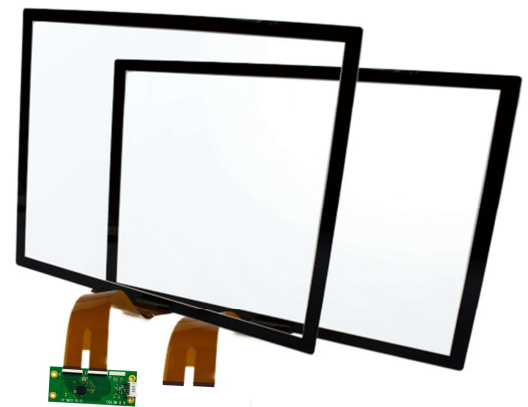
These touch screen sensors conveniently deliver high performance at low cost to original equipment manufacturers and system integrators aiming to deliver multi-touch behavior into control panel, interactive digital signage, and kiosk applications.

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.

Cover Glass
Silver Ink Traces
Patterned ITO
Optical Adhesive
Patterned ITO
Sensor Glass
Silver Ink Traces

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
Standard Sensor Thickness …………………………………… 3.3mm
Light Transmission [Clear] ………………………………….. ≥85%
Light Transmission [Anti-Glare Coated] …………………….. ≥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 ……………………… -10ºC to +60ºC, ≤90% RH
Storage Temperature ………………………… -10ºC to +65ºC, ≤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 >10V/m ……………………………………..Yes
RoHS3 …………………………………………………………… Compliant
REACH ………………………………………………………… Unaffected

⚠ WARNING: This product might expose you to chemicals known to the State of California to cause cancer or birth defects or other reproductive harm. For more information, see www.P65Warnings.ca.gov.

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°C
Storage Temperature ………………………………… -40°C to +110°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, I^{2}C, (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 ……………………………………………….. >100Hz
Response Time ……………………………………………….. <25ms
EMC Margin Testing ………………………………….. Built in capability
Orientation …………………………… Learned during sensor adaption
Maximum Glove Thickness ……………………………… up to > 4mm

CCA-05-102WL-01
CC-02-102WL-03

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ISO 9001:2015 REGISTERED

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.