



Innovative

Solutions in Touch Screen Technology

Adaptive Projected Capacitive Touch Screen Controller PCAP Controller Automatically Detects and Adapts to Sensor Size

Key Features

- ◆ Projected capacitive (PCAP)
- ◆ 1, 2, 5 or 10-point multi-touch
- ◆ 'ARGON' controller automatically adapts to sensors from 6" to 24"
- ◆ Glass-glass construction
- ◆ Excellent optical clarity
- ◆ Scratch-resistant
- ◆ Water & chemical resistant
- ◆ Light finger and glove operation
- ◆ Broad OS compatibility
- ◆ USB-2 HID interface
- ◆ USB security filtering
- ◆ No tuning software needed
- ◆ Reduced NRE & inventory
- ◆ Accelerated time to market
- ◆ Backward compatible with previous models of A D Metro's controllers

Applications

- ◆ Interactive digital signage
- ◆ Kiosks
- ◆ Industrial control panels
- ◆ Monitors

A D Metro's industry leading 'ARGON' high performance PCAP controller detects and automatically adapts its performance to a wide range of off-the-shelf sensors, formats and cover glasses.

A built-in configuration utility offers adjustment of orientation, touch sensitivity and maximum concurrent touches, and is particularly effective for embedded applications.

The ARGON patented controller can streamline your business from end to end (design to stock to service).

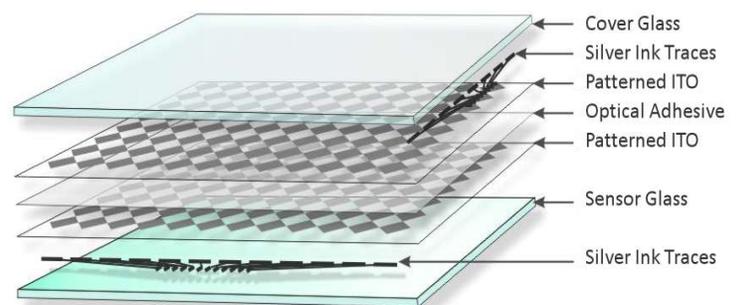
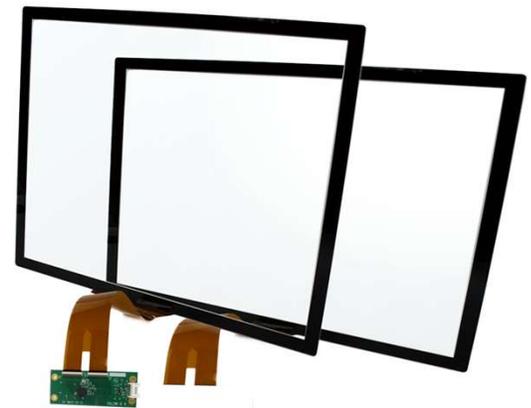
Combine with A D Metro's quality Projected Capacitive (PCAP) touch screen sensors for an easy and economical solution for original equipment manufacturers and system integrators to deliver the latest multi-touch technology into control panel, interactive digital signage and kiosk applications.

The demand for multi-touch and gesture control has never been higher. Users now have expectations of such features in commercial applications. Developers can use multi-touch to enable richer and more sophisticated user interfaces.

A D Metro's wide range of quality glass-on-glass sensors deliver excellent optical clarity and performance.

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

ARGON controller is a plug and play USB (HID) device. Alternative ARGON model adds RS232(3.3V) and I²C interfaces. Contact A D Metro for details.



Adaptive Projected Capacitive Touch Screen Controller Specifications when combined with A D Metro PCAP Sensors

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

Sensor Environmental Specifications

Operating Temperature	-10°C to +60°C, ≤90% RH
Storage Temperature	-10°C to +65°C, ≤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
PFAS	None intentional

Argon Controller Specification

Part Number USB-only controller	CCA-02-102WL-02
Part Number USB-A controller cable, 2m	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
Firmware	Universal, Pre-programmed

Interfaces

Sensor Interface	2 * 51 FPC adapters available for 68pin FPC and others
Host Interface	USB 2.0
Powering	Standard USB, 3.6V-5.5V
Typical Current Consumption	180mA

Operating System Compatibility

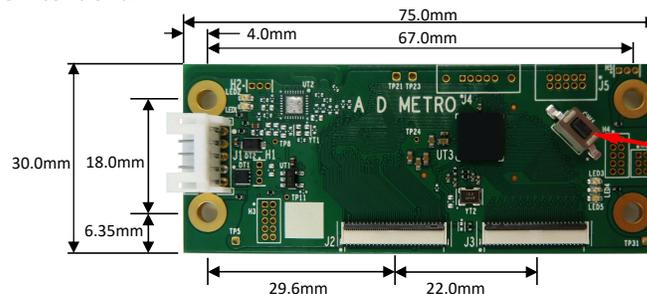
OS built-in driver operation (USB-2 HID compliant):	Windows 11, 10, 8.1, 7; Windows CE Embedded Ubuntu and other Linux
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Touch Performance

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 (Sensitivity learned during sensor adaption)
Water Rejection	Configurable



WARNING: This product can expose you to chemicals including Nickel which is known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov.



'Learn' button starts sensor adaption



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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.