



Innovative  
Solutions in Touch Screen Technology

## Adaptive Projected Capacitive ARGON Controller

Intelligent PCAP Controller Automatically Detects and Adapts to Sensor

### Key Features

- ◆ ARGON Projected Capacitive (PCAP) controller automatically senses and adapts to sensors from 7" to 24"
- ◆ 1 to 10-Point Multi-touch
- ◆ Light Finger and Glove Operation
- ◆ Broad OS Compatibility
- ◆ USB (HID), I2C and RS232 interfaces
- ◆ 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.

### Broad range quality sensors

- ◆ Glass-Glass sensor Construction
- ◆ Excellent Optical Clarity
- ◆ Scratch-Resistant
- ◆ Water & Chemical Resistant

### Applications

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

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

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

Automatically senses USB, I<sup>2</sup>C or RS232 (3.3V) connection and reports touch coordinates accordingly.



Adaptive Controller has Standard Footprint

The ARGON patent pending controller can streamline your product line from end to end (design to deployment).

This controller does not need any tuning software to set its parameters making it easy to setup in the anywhere anytime. It also does not require dedicated hardware drivers making it compatible with any operating system that can operate with a mouse. It simplifies inventory for customers wishing to implement PCAP in their product offering but to only need one controller that can handle all their sensor size requirements. This is especially useful for field servicing as the customer no longer needs to keep matching controller configurations or track firmware loads to ensure the right controller is brought to location in the event of field servicing. It's as easy to use as resistive technology

A D Metro touch panel kits are available with this controller and offers a quality glass-on-glass sensor with excellent optical clarity, bundled with the ARGON controller. Custom sensor sizes and additional features such as customer logos and special coatings are supported.

# Adaptive Projected Capacitive ARGON Controller Datasheet

## Controller Specification

Part Number .....CC-02-102WL-04  
 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

## Touch Performance

Max concurrent number of Touches ... Configurable 1, 2, 5 or 10  
 Touch Force ..... 0g  
 Input..... Finger tips  
 Max Glove Thickness ..... ≈2mm\*, adjustable  
 (\* when used with A D Metro sensors)  
 Touch Refresh Rate ..... >100Hz  
 Response Time ..... <25ms

## Regulatory

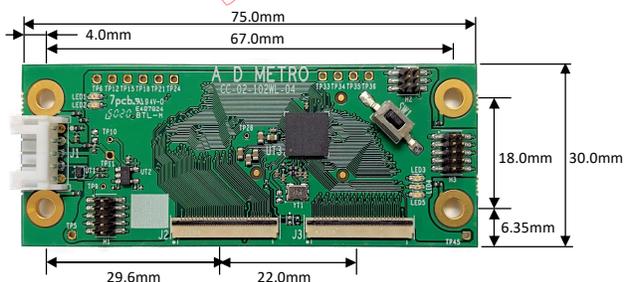
RoHS ..... Yes  
 FCC and CE Class B Emissions ..... Yes  
 FCC and CE RF Immunity (>10V/m) ..... Yes  
 UL ..... Compliant

## Interface

Interface ..... USB 2.0, I<sup>2</sup>C, RS232 (3.3V)  
 Powering ..... 5.0V or USB  
 Current - Operating Mode Typical ..... 380mA

## Operating System Compatibility

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



## Range of A D Metro Sensors Available

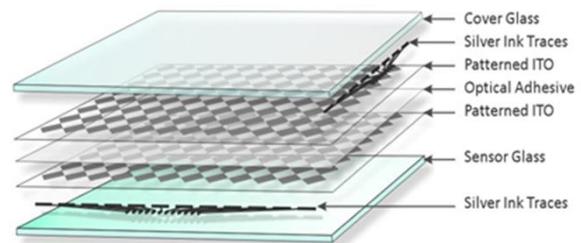
Screen ..... Tempered glass screen  
 Detection Type ..... Projected Capacitive  
 Standard Product Size Range ..... 7" to 24"  
 Formats ..... 5:4, 4:3, 16:10, 16:9  
 Cover Glass Hardness ..... ≥ 6.5 Mohs  
 Standard Sensor Thickness ..... 3.3mm  
 Light Transmission [Clear] ..... ≥85%  
 Light Transmission [AG ] ..... ≥90%  
 Sealing Compatibility ..... NEMA 4, 12; IP65  
 Sensor Lifespan ..... No sensing contacts to wear out

## 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 Options/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  
 Custom Sensor Sizes and Aspect Ratios



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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.