



Innovative

Solutions in Touch Screen Technology

Projected Capacitive Touch Screen Kits

Multi-Touch Projected Capacitive Sensors and Common Controller

Key Features

- ◆ Projected Capacitive (PCAP)
- ◆ 1, 2, 5 or 10-Point Multi-touch
- ◆ 6" to 42" Sensors
- ◆ Glass-Glass Construction
- ◆ Excellent Optical Clarity
- ◆ Scratch-Resistant
- ◆ Water & Chemical Resistant
- ◆ Light Finger and Glove Operation
- ◆ Common Controller Design For 6" to 24" Screen Sizes
- ◆ Broad OS Compatibility
- ◆ USB-HID interface
- ◆ Backward Compatible with previous models of A D Metro's controllers
- ◆ Mechanical Compatibility With A D Metro's Argon Adaptive PCAP Controller
- ◆ Reduced MOQ and NRE.
- ◆ Simplified, Supported Development

Applications

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

A D Metro's Projected Capacitive (PCAP) touch panel kits offer an easy and economical solution for original equipment manufacturers (OEMs) and system integrators to integrate the latest multi-touch technology into control panel, interactive digital signage and kiosk applications.

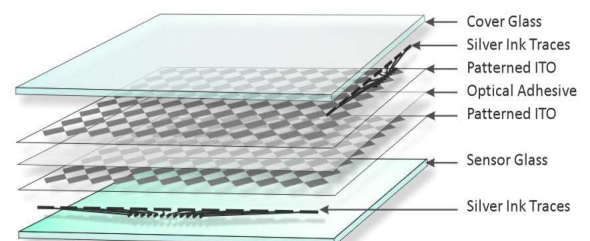
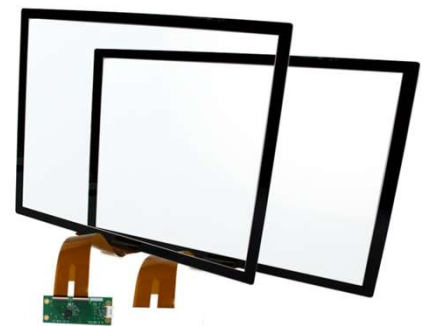
Users have become increasingly familiar with multi-touch and gesture control, and are now developing expectations of similar interactions when engaging with commercial applications. For developers, multi-touch enables additional degrees of freedom in their design, enabling a richer and more sophisticated user interface experience.

A D Metro's projected capacitive touch panel kits provide an innovative multi-touch screen solution. Solutions that can reduce development costs and accelerate time to market in embedded applications, by addressing common development issues with PCAP technology.

Each touch panel kit offers a high-quality glass-on-glass sensor with excellent optical clarity, bundled with a compact controller board. The common controller board addresses a range of sensor sizes and formats. This allows the integration of the common controller board into a design that will support a range of screen sizes and formats, enabling greater flexibility during the product development cycle of your application. Since many standard size screen sensors and formats are available as commercial off the shelf (COTS) solutions, they can reduce the potential MOQ and NRE costs often associated with development of PCAP based solutions.

USB-HID controller compatible with a broad range of operating systems, simplifies development and accelerates time to market.

Common controller programming tool can reduce OEM inventory and NRE.



Projected Capacitive Touch Screen Kits

Datasheet

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 Standard 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 $+60^{\circ}\text{C}$, $\leq 90\%$ 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 $>10\text{V}/\text{m}$ Yes
 RoHS3 Compliant
 REACH Unaffected



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

Standard Controller Specification

Part Number Controller CC-02-102WL-03
 Part Number USB-A controller cable, 2m 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
 Requestable Firmware Size, orientation & sensitivity

Interfaces

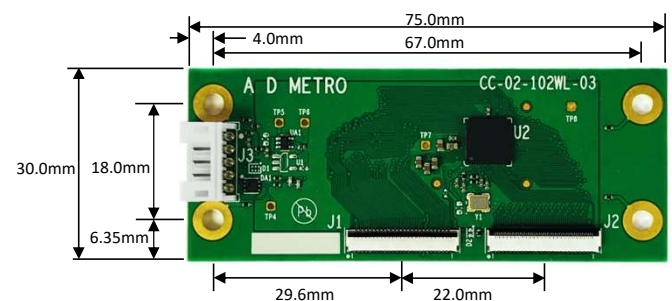
Sensor Interface 2 * 51 FPC
 adapters available for 68pin FPC and others
 Host Interface USB 2.0
 Powering Standard USB, (5.0V)
 Typical Current Consumption 100mA

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 Set at 1, 2, 5 or 10
 Touch Refresh Rate $>100\text{Hz}$
 Response Time $<25\text{ms}$
 Orientation Learned during sensor adaption
 Maximum Glove Thickness Set at 1.5mm up to 4mm



1390 Star Top Rd.
 Ottawa, ON, Canada K1B 4V7



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.