



Luminary Touch Series- High performance enhanced PCAP touch – Standard sizes from 3.5” to 85” displays



Features:

- Customizable high performance PCAP touch
 - Print-free, Smudge-free coatings
 - Hardened Glass
- Specialized cover glass for harsh environments
- Screen Printing
- Low minimums; No to Low NRE
- Water resistant touch through coatings and firmware
- Gloved hand compatible

Luminary Touch is an enhanced PCAP touch product line offers PCAP sizes and performance unique to the digital signage market. Our touch series starts with PCAP touch ranging from 3.5” to 85” inches. Luminary Touch is then easily modified with a wide variety for features such as AR coated glass, print-free glass, and screen printing and hardened glass. The touch element is multi-touch, immune to bright ambient light, electrical noise rejection, as well as arm/palm rejection. .

Luminary Touch is structures the touch enhancements as “Spec Standards”. Our enhancements use standard materials and processes that allow us to assemble them to customer’s specifications. This allows the customer to pick from a long list of PCAP options and to order them “ala carte”. Luminary can easily match the size (diagonal) of the touch to a number of touch enhancements offerings allowing “mix and match” of the touch features to meet design needs without large minimum quantities or costly NRE charges.

Luminary Touch custom selection of touch features

Luminary Touch offers an assortment of cover glass and optional rear glass to our line of touch screens

DuraCoat- DuraCoat is Luminary Touch proprietary AR coating. It is Print-Free, Oleophobic and Hydrophobic. It also has an 8H hardness to it can be cleaned with most cleaners and towels. The coating is also salt-fog tolerance.

Hardened AR- For nearly unbreakable cover glass, Luminary Touch offers an AR coating on heat treated glass

Screened Cover Glass- Customize your application with custom screen printing. Printed in the internal layer of the touch screen, printing can be order in simple black surround to a full array of colors and your company’s logo.

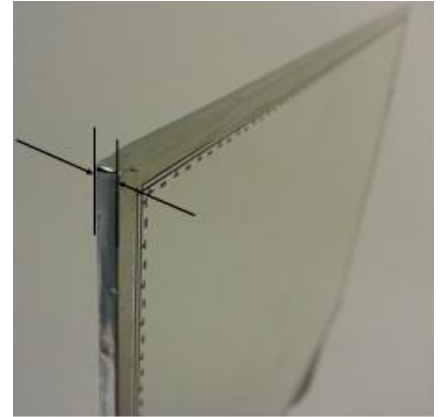
EMI Filters- For unique requirements calling for Electromagnetic Interference protection, rear glass filters from 12ohm/sq to 5ohm/sq ITO as well as EMI mesh is offered.

Heaters- For display operations in environmentally severe applications, ITO heaters are available. Standard ITO resistance of 12 ohms/sq is offered.

Optical Bonding- To finish off any outdoor application, Luminary Touch offers optical bonding on all display sizes, up to 100” displays. Bonding offers the maximum optical performance while reinforcing and protecting the display in most harsh environmental applications.

Luminary PCAP Enhancement Options:

- Anti-Reflecting AR Glass Cover Glass 1.1mm, 2mm and 3mm
- Anti-Reflecting DuraCoat Cover Glass- Print Free, Smudge Free, Hard Coat- 1.1mm, 2mm and 3mm
- Hardened Cover Glass- Chemical Strengthened with or without std. AR
- Etched Anti-Glare 95 Gloss Cover Glass- 1.1mm and 3mm
- Etched Anti-Glare 95 Gloss with AR coating- 1.1mm and 3mm
- Screen printing and border graphics
- 12 ohm ITO EMI filter
- 12 ohm ITO Heater Glass
- Polarized sunglass compatible film (readability from any angle)
- Circular Polarized Cover Glass



AR cover glass, with touch sensor and 12 ohm/sq ITO EMI filter is only 2.6mm thick

Advanced Touch Functions:

Electromagnetic interference (EMI) is prevalent in most environments. Luminary Optics can apply EMI filters to the rear of the touch, suppressing any internally generated EMI, but what about the EMI field emitted by the touch sensor? The Luminary Touch sensor controllers utilize powerful firmware and hardware techniques to avoid noise interference at different frequency bandwidths and maintain the accuracy of touch detection by the touch controller. Luminary Touch solutions can meet CS (Conducted Susceptibility) 3Vrms and RS (Radiated Susceptibility) 3V/m EMC standards. In some applications, our controllers are able to meet CS 10Vrms and RS 10V/m EMC standards.

In many applications, gloved touch is a primary concern. Our Thin Core touch sensors detect touch by measuring small changes in the electric field as a finger approaches the surface of the touchscreen. Gloved touch can increase the difficulty of touch detection. Our controller's unique algorithms are implemented so that gloved touch, whether with latex gloves, cotton gloves, or work gloves, can be detected effortlessly and accurately.

Since water is conductive, false touch signals may be generated when water comes into contact with the PCI touch panel. For outdoor or in wet environments, the ability to prevent false touch events caused by water is an important part of Luminary Touch specifications. Luminary uses two approaches. First, with our DuraCoat hydrophobic topcoat AR, water merely beads up and rolls off the screen. On areas that water does stay on, our products are able to avoid the occurrence of false touch signals. If water is present, dry areas of the touch panel surface will still function properly. If excessive water should occur, the affected area turns off. Once water on the surface is wiped dry, the touch panel will resume normal touch functionality, without rebooting the touch controller.