



Projected Capacitive

For Outdoor and Through-Glass Applications

Elo's projected capacitive technology enables touches to be sensed through a protective layer in front of a display, effectively allowing touchmonitors to be installed behind store windows or vandal-resistant glass. The transparent projected capacitive touchscreen, which is installed between the display and a protective outer layer, allows the complete system to have unsurpassed resistance to impacts, scratches, and vandalism commonly found in public-access applications. The sensing technology is also unaffected by moisture, heat, rain, snow and ice, or harsh cleaning fluids, making it ideal for outdoor applications as well. Offered in two versions: DirectTouch, which consists of a 7.8 mm sensor with tempered glass outer layer, and ThruTouch, which is optimized to work through a customer-installed outer layer. The solid-state touchscreen and controller provide increased levels of reliability and longer life expectancy, resulting in a drift-free response and a low-maintenance unit that requires no recalibration.

Benefits

- Works outdoors—in rain, snow, ice, and dust
- Touch function operates through customer-installed materials, including vandal-resistant glass up to 18 mm thick
- True flat front surface possible with no bezel
- Works with gloves
- Works even if glass is scratched or broken

Applications

- Outdoor kiosks
- Ticketing machines
- ATMs
- Web phones
- Pay-at-the pump gas machines
- Through-glass, undercounter, and bartop applications

Projected Capacitive Specifications

MECHANICAL

Input Method	Finger or gloved hand activation
Sensor Thickness	DirectTouch: 7.8 mm ThruTouch: 5.8 mm (plus customer supplied glass up to 18 mm thick)

ELECTRICAL

Positional Accuracy	<1.5% of reported position in recommended viewing area
Resolution	4096 x 4096
Touch Activation Force	No minimum touch activation force is required
Controller	Integral with the screen, with RS232 interface

OPTICAL

Light Transmission	Up to 88% per ASTM D1003-92
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ENVIRONMENTAL

Temperature	Operating: -15°C to 70°C Storage: -40°C to 70°C
Relative Humidity	Operating: 0°C at 90% RH, noncondensing
Chemical Resistance	Glass is unaffected by cleaning solutions
Electrostatic Protection	Laminated glass assembly complies with EN 60950, UL 60950, and UL 544
Agency Approvals	UL, TÜV Bauart, FCC, CE
Sealability	Can be sealed to meet NEMA 4 and 12, and IP65 standards

DURABILITY

Abrasion Resistance	Glass front, unaffected by surface scratching
Expected Life	No known wear-out mechanism from touch
Shock/Vibration	In accordance with UL291 when installed in a suitable correct bezel
Impact Resistance	Meets UL-60950 and CSA C22.2 No. 60950 ball drop test (0.5 kg, 50 mm diameter ball dropped from height of 1.3 m)
Water	Resistant to water droplets on the surface
Weather	Resistant to snow, ice, rain, sleet, hail, wind, etc.
Warranty	2-year limited warranty

To find out more about Elo's extensive range of touch solutions, go to www.elotouch.com, or call the office nearest you.

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