



Projected Capacitive2 Touch Technology

For Outdoor and Through-Glass Applications

Elo's Projected Capacitive2 touch technology enables touches to be sensed in two ways: directly on the screen or through a protective layer in front of a display, effectively allowing touchscreens and touchmonitors to be installed behind store windows or vandal-resistant glass. The new Projected Capacitive2 touchscreen is thinner and lighter than previous versions. When paired with the new external 6610 USB controller and dedicated Elo driver, increased levels of reliability and longer life expectancy are obtained, resulting in a drift-free response and a low-maintenance unit that requires no recalibration.

The transparent projected capacitive touchscreen, when installed between the display and a protective outer layer, allows the complete system to be resistant to impacts, scratches and vandalism commonly found in public-access applications. The sensing technology also resists moisture, heat, rain, snow and ice or harsh cleaning fluids, making it well-suited for outdoor applications.

It can be used in two mounting installations:

DirectTouch—a 3 mm sensor with the sensing wires on the back and the glass surface facing the user

ThruTouch—a 3 mm sensor with the sensing wires facing the user and covered by an additional sacrificial glass or plastic filter (customer installed outer layer) up to 10 mm

The solid-state touchscreen and new USB controller provide increased levels of reliability and longer life, resulting in drift-free response and a low-maintenance unit that requires no recalibration.

Benefits

- Flexibility with two versions to meet diverse usage requirements
- Works outdoors—in rain, snow, ice, and dust
- Touch function operates through customer-installed materials, including vandal-resistant glass up to 10 mm thick
- True flat front surface possible without 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, under counter, and bar-top applications

Projected Capacitive Specifications

MECHANICAL

Input Method	Finger or gloved hand activation
Sensor Thickness	3.5 mm If used as ThruTouch: add customer supplied glass up to 10 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	6610 external, with USB interface

OPTICAL

Light Transmission	Up to 90% per ASTM D1003-92
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ENVIRONMENTAL

Temperature Operating	-20°C to 60°C
Storage	-30°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, virtually 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
Resistance	To water droplets on the surface and to severe weather conditions, such as 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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