



IntelliTouch® Surface Acoustic Wave Touch Solutions

Elo first introduced Surface Acoustic Wave (SAW) touch technology over 25 years ago in 1987. SAW touchscreen technology delivers superior image clarity, resolution, light transmission, and reliability because it utilizes clear glass that continues to work even if scratched. There are no coatings, plastic films or moving parts to wear out or be damaged. The active area of the touchscreen is resistant to chemicals such as acetone, toluene, methyl ethyl ketone, isopropyl alcohol, methyl alcohol, ethyl acetate, ammonia-based glass cleaners, gasoline, kerosene, and vinegar.

Elo offers IntelliTouch SAW technology with transactional single touch or interactive multi-touch capabilities. Micro-bezel or zero-bezel designs are offered along with fully tempered, heat or chemically strengthened glass for ruggedized applications. IntelliTouch technology has met all the Additional Qualification (AQ) testing requirements established by Microsoft for Windows 7 multi-touch touch gesture recognition.

IntelliTouch SAW is a cost-effective alternative to projected capacitive (PCAP) touch technology that offers better optical clarity and the same zero-bezel style with significantly smaller border width. Three axes of touch information are used to precisely discern two simultaneous touch locations anywhere on the screen. IntelliTouch solutions offer a simple bill of material, a less complex manufacturing and touchscreen integration process, and less capital investment than PCAP technologies.

Customization capabilities include logos, clear icons, border buttons, and other enhancements can be added during the design cycle. IntelliTouch can scale across a wide range of screen sizes, without performance degradation. The stable, drift-free operation of SAW touchscreen technology provides an accurate touch response measured on three axes using a finger, gloved hand, or passive stylus. Elo's sensitive touch response recognizes location and amount of pressure applied. Elo has tested IntelliTouch touchscreens to more than 50 million touches in one location without failure, using a stylus simulating a finger. The graphics quality and colors of HD resolution software applications are preserved based on the optical clarity of SAW clear glass touch technology.

Applications

- Desktop touchmonitors and all-in-one touchcomputers.
- Public environments such as hotel lobbies, office buildings, auto dealerships, bank branches, gaming casinos, healthcare waiting rooms, retail stores and train stations
- Point-of-information kiosks
- Vending and ticket sales
- Gaming, lottery, and amusement
- Interactive Digital Signage
- Banking and financial transactions
- Industrial control rooms

Features

- Patented technology
- Supports dual touch
- Compatible with Microsoft Windows 7 operating system
- Available in standard and wide format, 7-inch to 32-inch diagonal
- Pure-glass construction for excellent image clarity, resolution, and light transmission

Benefits

- Completely flat touchscreen offers sleek, refined appearance
- No bezel required for easy integration into touchmonitors, touch computers or other devices
- Fast accurate, and stable touch performance
- Tested to more than 50 million touches in one location without failure

About Elo

Elo founders pioneered the touch screen over 40 years ago. Today, Elo Touch Solutions is a leading global supplier of touch-enabled technology, products and industry solutions. The Elo portfolio encompasses the broadest selection of OEM touchscreen components, touchmonitors, and all-in-one touchcomputers for the demanding requirements of diverse markets, including gaming machines, hospitality systems, industrial automation, interactive kiosks, healthcare, office equipment, point of sale terminals, retail displays, and transportation applications. The Elo touch experience has consistently stood for quality, reliability and innovation with over 20 million installations worldwide.

IntelliTouch® Surface Acoustic Wave Specifications

Mechanical	
Input Method	Finger or gloved hand (cloth, leather, or rubber) activation, or soft stylus
Profile	Front surface of touchscreen is completely flat
Available Sizes*	7.0" to 32"
Electrical	
Positional Accuracy	Standard deviation of error is not greater than 2.5mm and typically much less with calibration to display image
Resolution	6.19 points per mm typical (A/D sampling capability is extended by pattern recognition software)
Touch Activation Force	2 to 3 ounces (55 to 85 grams) typical
Controller	USB
Optical	
Light Transmission	92% ± 2%
Anti-Glare Surface Gloss	95 ±15 or 65 ±15 gloss units when measured per ASTM D2457 using a 60-degree gloss meter
Environmental	
Temperature	Operating: 32° to 122°F (0°C to 50°C); Storage: -40° to 160°F (-40°C to 71°C)
Relative Humidity	Operating: 40°C at 90% RH, noncondensing
Altitude	Operating: 10,000 ft (3,048m); Storage/transport: 50,000 ft (15,240m)
Chemical Resistance	The touch active area of the touchscreen is resistant to chemicals that do not affect glass, such as: acetone, toluene, methyl ethyl ketone, isopropyl alcohol, methyl alcohol, ethyl acetate, ammonia based glass cleaners, gasoline, kerosene, vinegar
Electrostatic Protection	Per EN 61000-4-2, 1995 meets Level 4 (15 kV air/8kV contact discharges)
Agency Approvals	UL, cUL, TÜV, CE, FCC Class A, RoHS compliant
Sealability	IntelliTouch Zero-Bezel touchscreen has been successfully integrated by integrators to meet NEMA 3/3R/5/12/12K/13, IPX1 standards
Durability	
Surface Durability	Surface durability is that of glass, Mohs' hardness rating of 6.5
Expected Life	No known wear-out mechanism, as there are no layers, coatings, or moving parts. IntelliTouch technology has been operationally tested to more than 50 million touches in one location without failure, using a stylus similar to a finger.
Warranty	Touchscreen: 2-year limited warranty

*Available in standard or to be made upon custom requests with in technology capability size offering. Please email Customer Service at customerservice@elotouch.com or contact your local office.

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

North America

Elo Touch Solutions
1033 McCarthy Boulevard
Milpitas, CA 95035

800-ELO-TOUCH

Tel +1 408 597 8000
Fax +1 408 597 8001
customerservice@elotouch.com

Europe

Tel +32 (0)16 70 45 00
Fax +32 (0)16 70 45 49
elosales@elotouch.com

Asia-Pacific

Tel +86 (21) 3329 1385
Fax +86 (21) 3329 1400
www.elotouch.com.cn

Latin America

Tel 786-923-0251
Fax 305-931-0124
www.elotouch.com

Elo Touch Solutions, Inc. reserves the right to change or update, without notice, any information contained herein; to change, without notice, the design, construction, materials, processing or specifications of any products; and to discontinue or limit production or distribution of any products. Elo (logo) and Elo Touch Solutions are trademarks of Elo Touch Solutions, Inc. Copyright 2014 Elo Touch Solutions, Inc. All rights reserved. DS000094, rev A 05/14

