

# Touch Solutions for Medical and Healthcare Applications

- MEDICAL MODALITY INSTRUMENTS
- SURGICAL IMAGING MANAGEMENT SYSTEMS
- PHARMACY AUTOMATION
- POINT-OF-CARE AUTOMATION
- CLINIC PRACTICE MANAGEMENT
- COMPUTER-AIDED DIAGNOSIS AND THERAPY
- CLINICAL DIAGNOSTIC INSTRUMENTS
- HEALTHCARE SELF-SERVICE KIOSKS





# Touch: Simplifying complex systems efficiently

In an arena where simplification of complex systems is essential and accuracy is critical, a touch interface is the fastest, easiest way for healthcare professionals and patients to interact with technology—and the most direct and natural.

Tyco Electronics' Elo TouchSystems business is a world leader in touch technology. The reliable operation of Elo touch-based products exceeds the medical standards for response and accuracy. Elo medical touchscreens are completely sealable against liquid splashes and operate accurately even when subjected to water or other substances such as ultrasound gels. Equally at home in the operating room and the waiting room, Elo touchscreens can be activated with a finger, rubber-gloved hand, or stylus—all ubiquitous in medical settings.

We routinely collaborate with medical OEMs, software developers, IT systems integrators and kiosk producers, and will work with you to seamlessly integrate Elo products into your total solution.

So whether you are an OEM designing a new instrument, an administrator with an eye to improving efficiency, or a caregiver eager to supply intuitive patient education and self-service systems, we can provide you with touch solutions for virtually all applications within the healthcare environment.









## Interfacing with imaging, instrumentation, and control

The world of medical imaging instrumentation and control equipment is the perfect arena in which the versatility and flexibility of touch solutions can excel. Elo medical-grade LCD touchmonitors provide the ideal operator interface for both radiological imaging equipment such as digital and computed radiography, digital fluoroscopy and mammography, and nuclear medicine or surgical imaging, such as endoscopy and operating room (OR) imaging control.

An Elo touchmonitor can also be a natural control interface and display when developing patient care monitoring systems and cardiovascular examination devices, as well as an operator interface for instruments in the laboratory—such as blood and immunoassay analyzers and clinical chemistry testers—and computer-aided therapy such as image-guided radiotherapy (IGRT) and physical therapy.

Elo desktop touchmonitors can be mounted on a mobile cart and moved around easily to meet changes in floor space layouts, and the VESA mounting standard means they can be placed on existing medical fixtures such as shelving, walls, and swing arms to expand interactive opportunities. Elo open-frame and rear-mount touchmonitors include a specially-designed chassis and sealed bezel to integrate easily into your existing medical equipment or kiosk.

Medical-grade Elo touchmonitors are available with UL2601 and IEC 60601 certifications. Elo's IEC 529/IPX1 enclosure design, coupled with the addition of a special gasket, ensures that the entire touchmonitor sheds water and is safe from liquid drops and spills.

We can also work with you to provide custom solutions designed to your specific requirements.



## Wide range of touch technologies

Touch can play an important role in all aspects of medical instrumentation and equipment. Tyco Electronics' Elo TouchSystems has a wide portfolio of touch technologies, each optimized for different operating characteristics and environments. Our touch technologies are available as components for OEMs or can be integrated into a complete touchmonitor.



Acoustic Pulse Recognition (APR). APR combines the ultimate in optical qualities, durability, and stability, with excellent dragging properties. Along with stylus, glove, bare finger and fingernail activation, APR is well-suited for many diverse applications including public kiosks, patient bedside monitors and medical instrumentation. In addition, its pureglass surface is resistant to scratches, water and other contaminants on the screen, can be sealed and cleaned with disinfectants, and scaled from 2.5-inch to 42-inch displays.



Resistive. We offer AT4 four-wire resistive touch-screens for small form factor applications (≤10.4") such as handheld devices, and AccuTouch five-wire resistive touchscreens for displays ranging from 6.4" through 21". Both resistive technologies can be activated with a finger or rubber-gloved hand, ID card or stylus; they continue to function despite liquid splashes on the touchscreen and can be sealed and sterilized. Elo AccuTouch is an extremely widely used touchscreen technology for medical applications.



Infrared. Elo CarrollTouch infrared touchscreens provide high optical sensor technology for applications requiring superior imaging performance or operation in glass-free environments. The display can be protected by a choice of glass or acrylic overlays optimized for optical clarity or safety. Well suited for applications such as X-ray equipment, CarrollTouch touchscreens provide stable, drift-free operation and deliver an extremely sensitive, accurate touch response.



Surface acoustic wave. Elo IntelliTouch surface acoustic wave touchscreens provide a picture-perfect, precision touch solution. IntelliTouch is a widely used touchscreen technology for non-critical and patient-activated healthcare applications.

## Helping OEMs simplify the interface

Tyco Electronics' Elo TouchSystems develops products and services that provide medical OEMs with a vast selection of technologies and solutions to help them simplify the operator interface. For the laboratory, the operating room, or anywhere else a caregiver functions, we can provide products for easy integration into a complete system. It's not surprising that we have built a wide variety of successful relationships with medical OEMs, with all that we offer:

- A high quality standard of products and services.
- Over 35 years of experience in the touch industry. We invented touch in 1971 and have been consistently innovating ever since.
- Touchmonitors "designed for touch" from the ground up, in a vast variety of form factors, sizes, colors, touch technologies and peripherals.
- Long product life as we own all designs and tooling and control all specifications.
- Worldwide agency approvals and certifications, including UL2601 / IEC 60601 and drip-proof IEC 529/IPX1.
- Custom design capabilities.
- A well-established supply chain and Asiabased controlled manufacturing processes.
- Global support in sales, technical support and logistics.



## Touch is the trend for operator interface

Easy to use, reliable, and stable, Elo touchscreens, touchmonitors, and touchcomputers bring powerful simplicity to equipment, instrumentation, and services, and improve the efficiency of devices operated by medical professionals and patients.

### **Healthcare providers**

Our touch-based solutions can help caregivers to simplify operational functions such as record management, computer-aided training, and testing, and to automate pharmacy functions.

### Patient self-service

Touch is the simplest, most natural interface between people and technology. From patient self check-in through health education consoles to automated blood-pressure test stations, Elo kiosk touch technology can help caregivers put patient services in touch.

### **Medical OEMs**

If you're an OEM designing new medical equipment, we can help you provide the perfect interface for devices such as radiography machines, ultrasound machines, medicine dispensation systems, clinical diagnostic instruments, cardiac management machines, bedside care systems, computer-aided diagnosis and detection (CAD), patient monitoring units, and much more.



# The right prescription for healthcare automation



Whether for maintaining electronic medical record management, computerized physician order-entry systems, nurses' stations, or mobile point-of-care units, our multifunction LCD touchmonitors enable healthcare professionals to input data quickly and efficiently at the touch of an icon, reducing tedious tasks and eliminating the potential for error. These versatile touchmonitors include options for a magnetic stripe reader (MSR) and, for areas where security is key, a biometric fingerprint recognition device.

Our larger touchmonitors make an excellent tool for computer-aided training and testing. With a natural touch interface, trainees can focus on the material without the distraction of an input device.

## Clinical, dental office automation

Touch is the perfect interface for fast access to patient records and automation of tasks such as patient appointment scheduling. Our affordable desktop touchmonitors' convenient design takes up little space, and the lockable controls are on the side instead of the front. All models are also customizable to meet a special set of usage requirements.

## Pharmacy automation



Touch provides the same universal ease of use and effectiveness in medicine and medical supply dispensation and management systems and in point-of-sale (POS) solutions. Effective automation is achieved simply and efficiently with our multifunction LCD touchmonitors with integrated MSR and rear-facing customer display—or with our all-in-one touchcomputers, which provide the same multifunctionality in the footprint of a standard display.

## Putting patient self-services in touch



Touch can be used by anyone, regardless of language, education, socioeconomic or cultural background. In the healthcare arena, Elo touch technologies not only help ease the load of patient services, but also enable patients to perform non-specialized tasks themselves, including self check-in, hospital point-of-information (POI), education consoles, medical modality printing, and bedside automated services.

## Interactive public access kiosks



A freestanding or integrated kiosk can automate patient registration, reduce paper workflow, and significantly speed up the check-in process. A kiosk also frees up valuable staff to pursue other functions. Similarly, a touch interface in a medical image-printing kiosk enables patients to select and print their medical records and even pay their bills. Interacting with a hospital POI kiosk, patients can quickly navigate through information about the hospital and its services and staff. Another space- and staff-saving function is provided by an automated blood-pressure test station. This kiosk can also be placed in a drugstore or pharmacy.

We offer touchmonitors and all-in-one touchcomputers in different form factors designed to be placed in either freestanding or integrated kiosks. We maintain the models' fixed outside dimensions much longer than the average plastic-case monitor manufacturer, reducing the chance you will need to redesign your kiosk around a monitor component change.

#### **Bedside services**



Using Elo touch technology, touchmonitors, or all-in-one touchcomputers, patients can conveniently order meals, surf the Internet, and view movies on demand, all from their bedside. Also using the same unit, caregivers have convenient real-time access to electronic patient records.

## Elo desktop touchmonitors







Elo desktop touchmonitors are ideal in medical applications for which cost, rugged design, and flexibility are key criteria. Packaged in different form factors, they are designed to be placed on existing fixtures such as a countertop, reception desk, or bedside, or as a natural control interface and display. Elo medical monitor certifications include UL2601/IEC 60601 and drip-proof IEC 529/IPX1, which allows the monitor to be sterilized with hospital-grade disinfectants.

Integrated options include magnetic stripe readers (MSRs), speakers and barcode scanners. Peripherals can be ergonomically integrated into the housing and designed to flow with the refined styling of the monitor.

We also offer customized monitors as well as specialized OEM touchmonitors designed to be part of complete systems, from the nurses' station to surgical imaging to the OR.

## **Elo open-frame** touchmonitors



Elo open-frame touchmonitors are specially designed to integrate easily into your kiosk enclosure. These monitors typically include Elo APR or surface acoustic wave touch technology, both widely used for kiosk applications due to their resilient pure glass surface.

## Space-saving touchcomputers





Elo all-in-one touchcomputers offer a complete system in the same footprint as a standard monitor. Silent, fan-less, and with full connectivity, they offer the ultimate in attractive, space-saving efficiency.

## A leading worldwide company

We have expanded our position in the medical market by proving ourselves every day—from the small details of design to quality demonstrated in lower total cost of ownership (TCO) over product life. Moreover, we are in your time zone, speak your language, and can deliver quickly from regional warehouses. We are there when you need us.

Tyco Electronics' Elo TouchSystems broad portfolio of touchscreen technologies, touchmonitors and touchcomputers are specifically designed for the demanding requirements of diverse applications. Elo has been recognized as a global brand leader in touch technology since inventing the touchscreen over 35 years ago.

Tyco Electronics Ltd. is a leading global provider of engineered electronic components, network solutions and wireless systems with customers in more than 150 countries. We design, manufacture and market products for customers in industries from automotive, appliances and aerospace and defense to telecommunications, computers and consumer electronics. With over 8,000 engineers and worldwide manufacturing, sales and customer service capabilities, Tyco Electronics' commitment is our customers' advantage.

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## Getting in touch with us is easy

Find out more about our extensive range of touch solutions.

Visit www.elotouch.com today and discover the perfect solution for your medical application. Or simply call the regional headquarters nearest you.

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