

MicroTouch™

Resistive Touch Screens

RESISTIVE TOUCH SCREENS

JATOT

TOUCH

VERSATILE • ECONOMICAL • FAST • EASILY INTEGRATED • VERSATILE • ECO

creens

3M *Innovation*

MICROTOUCH Resistive Touch Screens

VERSATILE • ECONOMICAL • EASILY INTEGRATED

Whether you choose PL or FG, 3M gives you the superior optical quality you want with the durability you need for your touch product. The chart below will help you choose the best touch screen design for your application requirements.

Construction	Features	Applications
FG Construction 4-wire and 8-wire	<ul style="list-style-type: none"> - Narrow Borders - Battery-powered operation - High resistive clarity - Physically robust 	<ul style="list-style-type: none"> - Portable devices - Consumer devices - Web pads - Thin clients - Remote controls
PL Construction 4-wire and 8-wire	<ul style="list-style-type: none"> - Impact resistant - Non-glass backing panels available. - EMI shielding available 	<ul style="list-style-type: none"> - Rugged portables - Factory automation - Instrumentation - Harsh environments
FG Construction 5-wire	<ul style="list-style-type: none"> - Fast response - Functions even if damaged - High use endurance for resistive touch screen 	<ul style="list-style-type: none"> - Point of Sale (Retail, Hospitality) - Voting machines - Financial

Exceptional touch screens.

With their simplicity, durability, and input versatility, MicroTouch™ resistive touch screens, manufactured by 3M Touch Systems, have become the leader in an ever-growing range of applications around the world. From a waitress keeping tabs on customers, to a skilled factory technician operating cutting-edge robotics, MicroTouch resistive touch screens provide the speed and accuracy required to meet a broad set of application requirements. PL (Polyester Laminated) construction offers a break-resistant design that withstands temperature and humidity fluctuations for rugged applications, whereas FG (Film on Glass) construction is offered for applications requiring high transmission optics in a less demanding environment.



INNOVATION YOU
CAN TOUCH



Benefits and Differentiators

Accuracy – Our resistive touch screens are more than 99 percent accurate.

Speed – Our resistive touch screens include one of the fastest resistive controllers on the market — capable of signature capture.

Quality – In-house film production gives us control of quality — from raw material to finished touch screens.

Clarity – Our superior topsheet choices offers high transmission, low reflection, and low haze to accommodate various lighting conditions.

Input Versatility – Resistive touch screens support alternative stylus — fingernail, credit card, gloved-hand — as well as finger input.

Durability – Our resistive touch screens are nearly impervious to grease, dirt, water, harsh contaminants, and chemicals. Using a choice of gasket materials, you can further seal the touch screen from contaminants and help buffer it against shock and vibration.



Meeting Application Challenges

The properties of our touch screens and the controller functions vary for each resistive design. However, the applied result is the same — a fast, accurate, affordable technology that works under a broad range of application requirements.

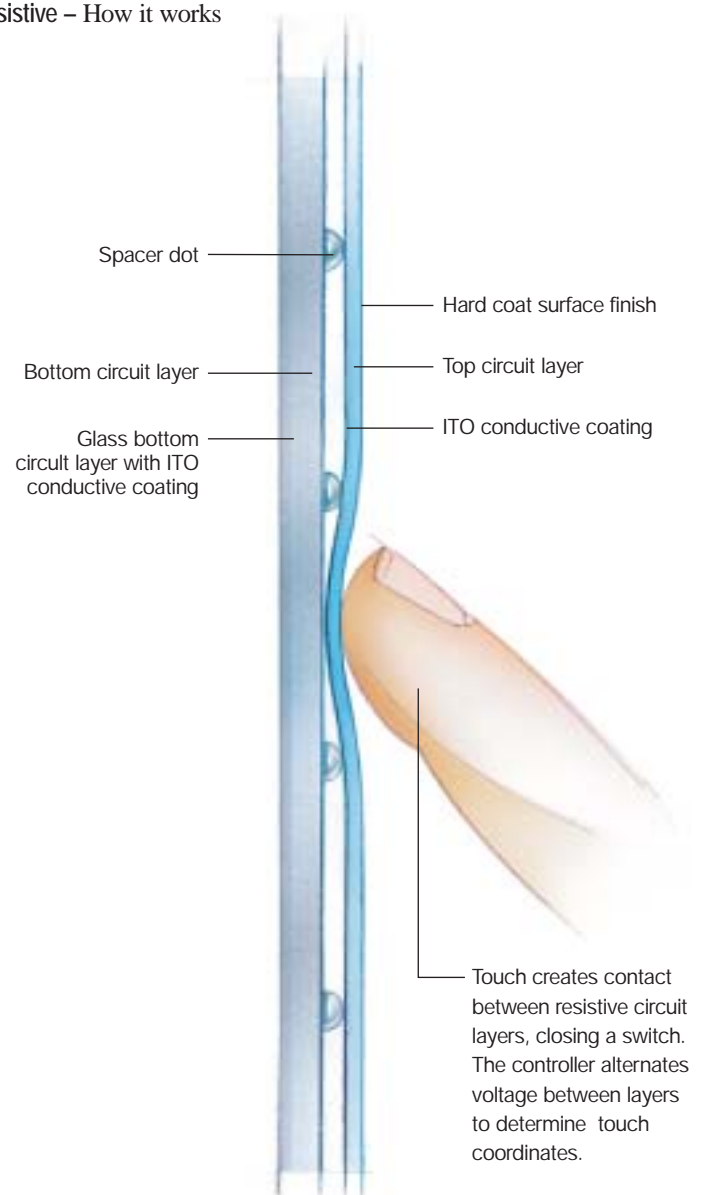
Resistive touch screens have a flexible top layer and a rigid bottom layer separated by insulating dots. The inside surface of each layer is coated with a transparent conductive coating. When the pressure of the touch creates contact between the opposing conductive layers, the touch screen's controller pinpoints the position of the touch and communicates the coordinates back to the host computer.

Given our range of resistive products — 4-, 5-, and 8-wire in PL or FG construction, you are assured that 3M will provide the best possible solution for your touch product.

Untouchable Accuracy

We manufacture our own unique conductive coating designed to optimize touch performance. Our conductive coatings are thin, uniform, and linear for precise touches every time. This hands-on approach to manufacturing enables us to maintain exceptional quality by controlling the process from start to finish.

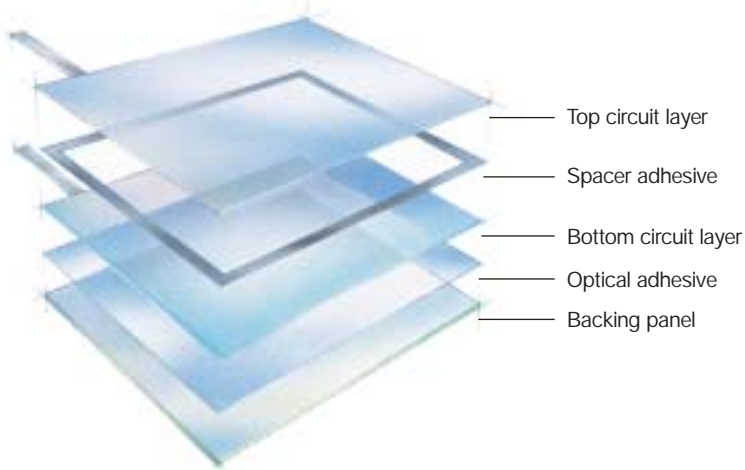
Resistive – How it works



Exceptional Durability

Field-proven Polyester Laminated (PL) construction gives our resistive touch screens outstanding durability. Using a full sheet of specially formulated, optical-grade adhesive, we bond the layers to a strengthened, shatter-resistant glass panel. That means our resistive touch screens can accommodate most corrosive liquids, spills, scratches, bangs, bumps, and dirt in extreme temperature and humidity.

Resistive – PL (Polyester Laminated)



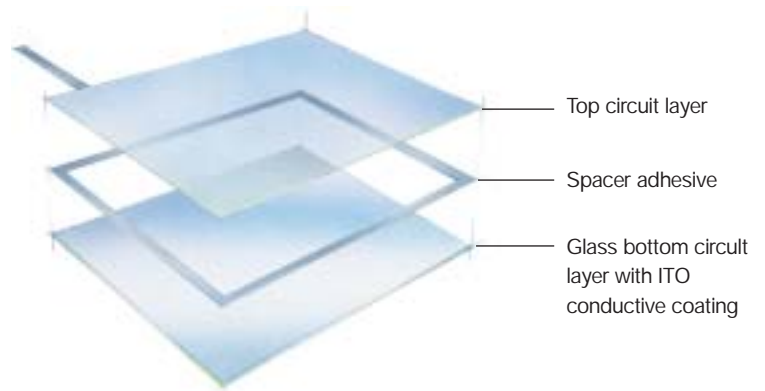
Optimal Clarity

Regardless of your application, excellent touch screen optics are a must. Industrial device menus must be easy to read. Battery-powered devices require clarity for low-light backlighting, while LCD monitors require the clearest optics to maintain viewing crispness. MicroTouch resistive solutions feature superb optical properties with high transmission and low haze. Choose from a range of topsheets for the optimum level of anti-glare or high-gloss finish.

Expertise for Custom Configurations and Options

3M Touch Systems offers you world-class expertise to help with your touch application. When you have a truly unique challenge — unusual size, application, or environment — you can turn to us for professional assistance. Acting as an extension of your development team, we work with you to design and manufacture a resistive touch screen to your specifications. We can silkscreen designs and logos onto sensors, build in membrane switches or software switches, add EMI shielding, incorporate contrast filters, or gasket-seal the touch screen for additional protection from dirt, liquids, and vibration.

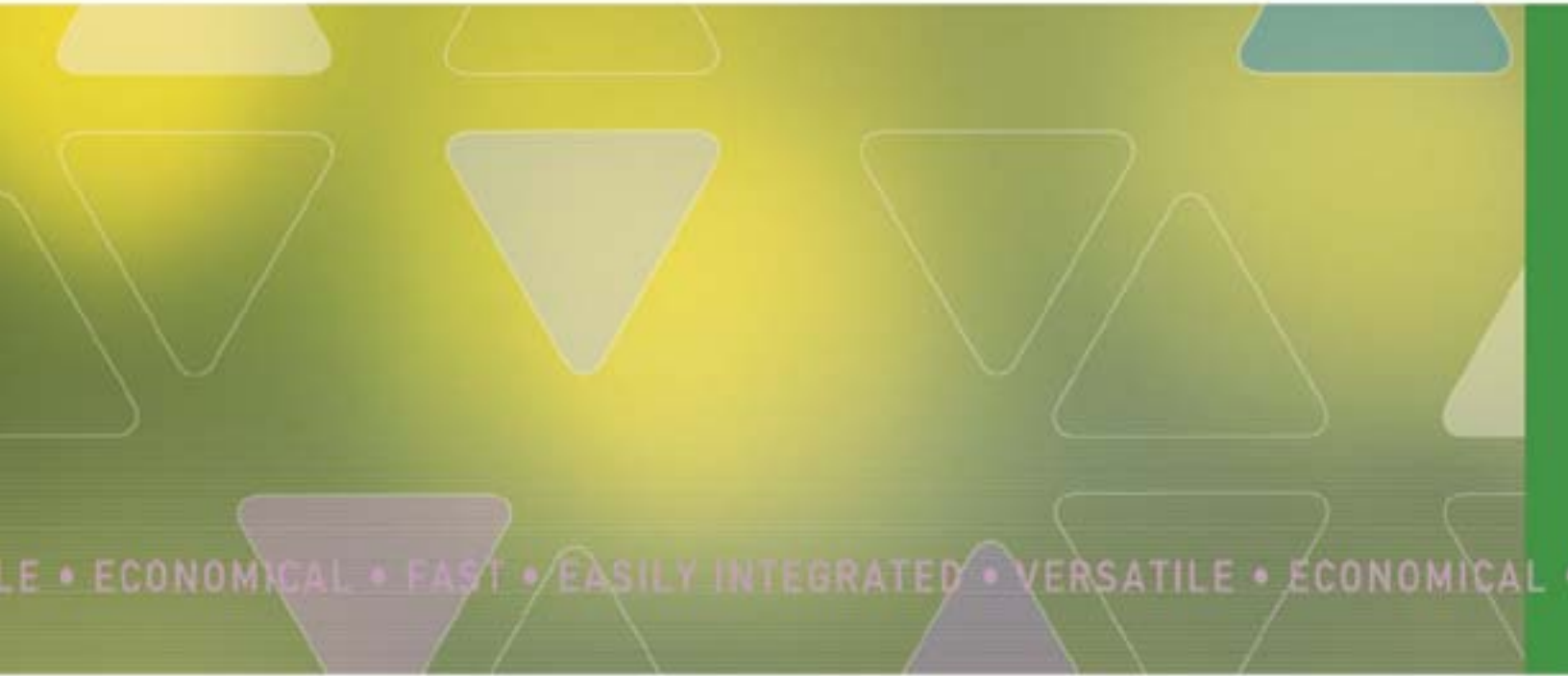
Resistive – FG (Film on Glass)



A Commitment to Quality

3M Touch Systems is the preferred global supplier of touch technology and offers innovative products and in-depth expertise backed by significant investments in manufacturing infrastructure and ongoing research and development.

With ISO 9001-certified manufacturing facilities in North America and several other offices and locations worldwide, you're assured of quality solutions, professional service and support, and expert technical assistance every step of the way. 3M Touch Systems also provides worldwide service and support through telephone technical assistance, our website, and e-mail correspondence. You're never out of touch.



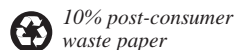
NOTICE: Given the variety of factors that can affect the use and performance of a 3M Touch Systems Product (the "Product"), including that solid state equipment has operation characteristics different from electromechanical equipment, some of which factors are uniquely within User's knowledge and control, it is essential that User evaluate the 3M Touch Systems Product and software to determine whether it is suitable for User's particular purpose and suitable for User's method of application. 3M Touch Systems' statements, engineering/technical information, and recommendations are provided for User's convenience, but their accuracy or completeness is not warranted. 3M Touch Systems products and software are not specifically designed for use in medical devices as defined by United States federal law. 3M Touch Systems products and software should not be used in such applications without 3M Touch Systems' express written consent. User should contact its sales representative if User's opportunity involves a medical device application.

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