

# 3M SCT3250EX System

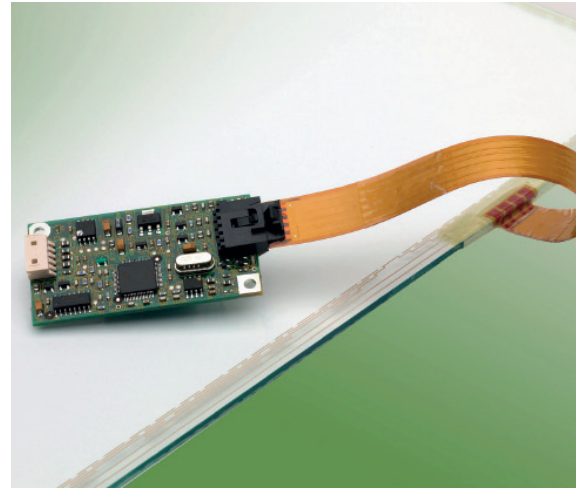
## The Clear Solution for Demanding Touch Applications

3M Touch Systems has more than 25 years of surface capacitive technology expertise and specifically designed the 3M™ System SCT3250EX to meet the performance requirements of display applications ranging from 5.7 to 32 inches. As an all-glass design, the SCT3250EX touch system offers light transmission up to 11.5% better than typical resistive sensors and 3.5% better than typical surface capacitive sensors (based on published specifications).

With the combination of the 3M™ ClearTek™ proprietary hard coat and a scratch-resistant top coat, the 3M™ Sensor SCT3250 offers superior surface durability compared to typical resistive and surface capacitive solutions. This surface durability feature helps the SCT3250 touch sensor support heavy-use applications while maintaining its functional, optical and aesthetic characteristics.

In addition to the superior 3M™ SCT3250 touch sensor design, the 3M™ Controller EX with its dedicated custom ASIC sets the performance standard for capacitive sensing electronics and offers industry-leading ESD protection (based on published specifications). The EX controller's proprietary firmware and patented algorithms dynamically adapt to changes in the application's environment to help maintain the initial video alignment of the display for the life of the product. And, due to the dedicated ASIC, the SCT3250EX touch system has a "minimum touch duration" that is 50% faster than typical surface acoustic wave and surface capacitive solutions (based on published specifications).

With millions of 3M surface capacitive touch systems in use around the world, the SCT3250EX touch system continues to be a preferred touch solution for demanding applications, such as gaming and retail, that require 24/7 reliability.



### Recommended Applications

- POS all-in-one devices
- Gaming machines
- Information kiosks
- Amusement stations
- Self-service systems
- Industrial devices
- Ticketing machines
- Healthcare displays

| Feature                                       | Benefit   |
|---|---|
| All-Glass Solution with 3M ClearTek Hard Coat | <ul style="list-style-type: none"> <li>• High light transmission provides superior display performance</li> <li>• Superior surface durability maintains optical and functional performance</li> </ul>                               |
| EX Electronics                                | <ul style="list-style-type: none"> <li>• High MTBF provides reliable system performance</li> <li>• High ESD performance to meeting industry requirements</li> <li>• Dedicated ASIC creates fast, accurate touch response</li> </ul> |
| Scratch-resistant Top Coat                    | <ul style="list-style-type: none"> <li>• Low surface energy resists surface scratching</li> <li>• Smooth surface for better drag and draw performance</li> <li>• Durable finish for easy-to-clean surface</li> </ul>                |

# 3M SCT3250EX System Specifications

The Clear Solution for Small Touch Applications

## System Performance

|                    |   |
|--------------------|---|
| Light Transmission | 91.5% ( $\pm 1.5\%$ )   |
| Input Method       | Finger contact  |
| Accuracy           | >99% of true position   |
| Resolution         | 1024 x 1024,<br>but capable of 16K x16K<br>when used with EX<br>controllers |
| Linearization      | Factory linearized  |
| Tail Connection    | Solder-less design  |

## Electronics (3M Controller EX)

|                        |  |
|------------------------|--|
| Communication          | USB, Serial,<br>USB HID Digitizer, Dual Mode<br>(USB and Serial) |
| Dimensions             | 1.30" x 2.55" x 0.45"<br>33.0 x 65.0 x 11.4 mm                   |
| Operating Current USB: | 75 mA (typical)  |
| Serial:                | 85 mA (typical)  |
| Sleep Current          | < 500 uA   |
| Power Connection USB:  | 5Vdc $\pm 5\%$ 75 mA   |
| Serial:                | 5-12Vdc $\pm 5\%$ 85 mA  |
| Connectors             | 5-pin locking AMP<br>(Touch side)<br>5-pin Molex (COM side)      |
| ESD                    | $\pm 8KV$ Contact, $\pm 27KV$ Air                                |
| Point Speed (PPS)      | 200 pps  |
| Minimum Touch Time     | 5.4 ms   |
| MTBF                   | >700,000 hours   |

## System Warranty

5 years on touch system  
Unlimited touch warranty



3M Touch Systems  
Subsidiary of 3M Company  
501 Griffin Brook Park Drive  
Methuen  
MA 01844  
U.S.A.

Tel: 1-888-659-1080  
Website: [www.3m.com/touch](http://www.3m.com/touch)

3M United Kingdom PLC  
3M Centre  
Cain Road  
Bracknell  
Berkshire  
RG12 8HT  
UK

Tel: +44 1344 857837  
Email:  
[touchsales-uk@mmm.com](mailto:touchsales-uk@mmm.com)  
Website: [ww.3m.com/touch](http://ww.3m.com/touch)

## Reliability

|                       |   |
|-----------------------|---|
| Surface Obstructions  | Withstands most surface<br>contaminants                 |
| Chemical Resistance   | ASTM-D-1308-02 and<br>ASTM-F-1598-95                    |
| Liquid Resistance     | Liquids on screen<br>do not impede touch<br>performance |
| Operating Temperature | -40° C to 70° C<br>for the touch screen                 |
| Storage Temperature   | -50°C and 85°C  |
| Humidity              | Up to 90% RH<br>from 0° C to 35° C,<br>non-condensing   |

## Mechanical

|                             |   |
|-----------------------------|---|
| Glass Thickness             | 0.125" (3.18 mm)  |
| Display Size                | Supported 5.7" (144.78 mm)<br>to 32" (812.80 mm)<br>(standard and wide formats) |
| Surface Scratch             | Hardness MoHS 7<br>or higher to induce a<br>functional failure                  |
| Scratch Resistance          | 3M™ ClearTek™ hard coat   |
| Sealing                     | NEMA 4X / IP66,<br>complete water-resistant<br>seal compatible                  |
| Cleaning                    | Water, isopropyl alcohol,<br>or similar non-abrasive cleaners                   |
| RoHS Directive<br>Compliant | Yes   |

## Operating Systems Supported

Windows 7 (32-and 64-bit)\*  
Windows Vista (32-and 64-bit)  
Windows XP (32-and 64-bit)  
Windows 2000, Server 2003, Server 2008 (32-and 64-bit)  
Windows 98, 95, ME, NT 4.0, NT 3.5, 3.1x (32-bit)  
Windows CE, XPe, WePOS (32-bit)  
Linux Kernel 2.6, Kernel 2.4 (serial only)\*\*  
Apple OSX (UPDD driver)\*\*

\* 3M System SCT3250EX HID is Windows 7 Logo Compatible  
\*\* Limited MT7 features supported

"RoHS 2011/65/EU" means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU, unless the substance is in an application that is exempt under EU RoHS. The MCVs are by weight in homogeneous materials. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

IMPORTANT NOTICE TO PURCHASER: Specifications are subject to change without notice. These 3M Touch Systems' Products and software are warranted to meet their published specifications from the date of shipment and for the period stated in the specification. 3M Touch Systems makes no additional warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose. User is responsible for determining whether the 3M Touch Systems Products and software are fit for User's particular purpose and suitable for its method of production, including intellectual property liability for User's application. If the Product, software or software media is proven not to have met 3M Touch Systems' warranty, then 3M Touch Systems' sole obligation and User's and Purchaser's exclusive remedy, will be, at 3M Touch Systems' option, to repair or replace that Product quantity or software mediator to refund its purchase price. 3M Touch Systems has no obligation under 3M Touch Systems' warranty for any Product, software or software media that has been modified or damaged through misuse, accident, neglect, or subsequent manufacturing operations or assemblies by anyone other than 3M Touch Systems. 3M Touch Systems shall not be liable in any action against it in any way related to the Products or software for any loss or damages, whether non-specified direct, indirect, special, incidental or consequential (including downtime, loss of profits or goodwill) regardless of the legal theory asserted.

3M, and ClearTek are trademarks of 3M Company. © 3M 2019 TSD-52302 REV-A

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [LCD Touch Panels](#) category:*

*Click to view products by [3M](#) manufacturer:*

Other Similar products are found below :

[69-502](#) [87-6001-221](#) [CABLE/RTP/USB](#) [98-0003-2211-9](#) [17-8041-226](#) [17-8041-227](#) [CABLE/RTP/RS232](#) [N010-0557-T011](#) [87-4011-201](#)  
[N010-0554-T352](#) [N010-0554-T504](#) [LCDAL04-0430TL0NCNTBR1.0](#) [FTAS00-8.4AS-4A](#) [FTAS00-10.6AW-4A](#) [FTAS00-5.7AS-4A](#)  
[FTAS00-15.6AW-4A](#) [FTAS00-10.4AS-4A](#) [FTAS00-12.1AN-4A](#) [TP01150A-4KB](#) [TP01121W-4KB](#) [TP01104A-4KB](#) [N010-0554-T814](#)  
[TP01121A-4KB](#) [TP01106W-4KB](#) [FTAS00-12.1AN-4](#) [98000334502](#) [FTAS00-12.1AW-4](#) [FTAS00-10.6AW-4](#) [TKU016CT-A100](#) [FTAS00-](#)  
[19AN-4](#) [FTAS00-15AN-4](#) [FTAS00-15.6AW-4](#) [FTAS00-12.1AW-4A](#) [17-8041-205](#) [98-0003-2514-6](#) [98-0003-2549-2](#) [98-0003-2602-9](#) [98-](#)  
[0003-2678-9](#) [17-8031-205](#) [17-8051-205](#) [17-8091-203](#) [17-8421-205](#) [17-8441-205](#) [17-8441-217](#) [17-8541-226](#) [17-8571-203](#) [17-8581-203](#) [17-](#)  
[8891-205](#) [17-8901-226](#) [17-9681-226](#)