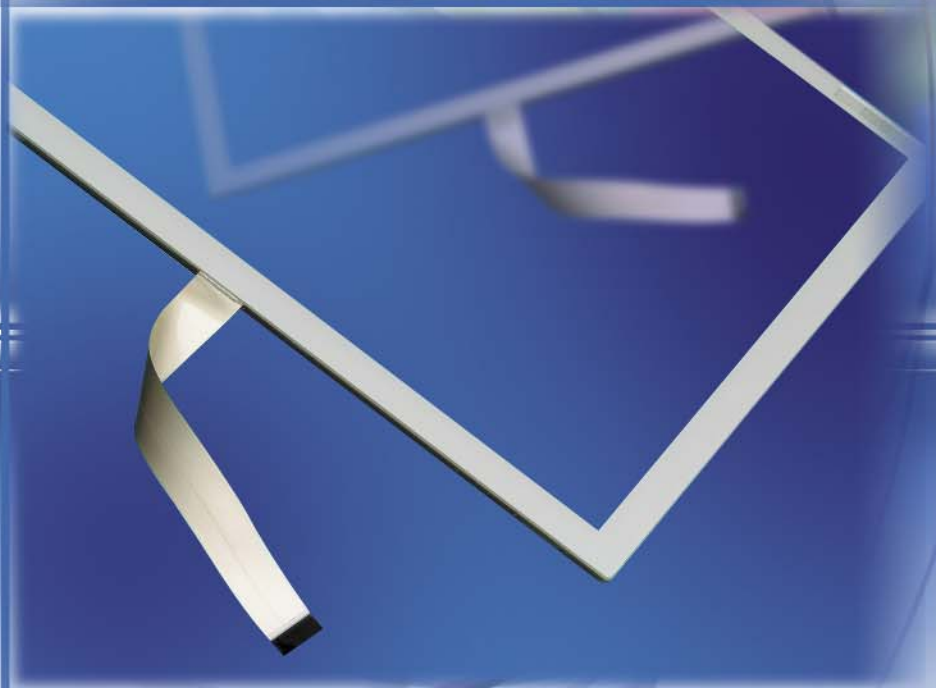




# Near Field Imaging Projected Capacitive Touch Screen



SEALABLE

RUGGED

ACCURATE

## Product Highlights

- Laminated construction with strengthened glass offers resistance to high impact forces
- Up to 92% light transmission and as low as 6% low light reflection
- Excels in harsh environments by allowing for a NEMA 4X (IP 66) seal (when properly integrated) and certification for hazardous locations
- Functions with a variety of gloves through a range of contaminants
- Withstands significant shock and vibration in extreme environments
- Near Field Imaging with Solar Reflecting Film maximizes infrared reflection to help block out solar rays—helping components inside the enclosure from overheating, which can cause functional failures.

## High Performance in Extreme Environments

MicroTouch™ Near Field Imaging Touch Screens are ideally suited for harsh environments where performance is key and touch screen operation must be unaffected by surface damage caused by abrasives, chemicals, or contaminants commonly found in heavy industrial environments, such as factory automation, utilities and mining.

MicroTouch™ Near Field Imaging provides vandal-resistance while offering premium optical characteristics for a variety of applications. Whether you're designing ticketing kiosks, implementing a curbside check-in system, or placing an industrial device in high-ambient light conditions, Near Field Imaging with Solar Reflecting Film is an ideal solution for a multitude of extreme environments.

## Making the Difference

By incorporating 3M's exclusive Vikuiti™ Solar Reflecting Film with Near Field Imaging technology, 3M provides a unique solution to a common challenge—performance issues caused by heat build-up inside applications exposed to direct sunlight. The innovative combination of these two 3M technologies is another reason why 3M is a premier supplier of touch screen solutions.

# MicroTouch™ Near Field Imaging Projected Capacitive Touch Screen

## Electrical

Accuracy	Within +/- 1% in one direction and within +/- 2% in the other direction within the precision area (with bare finger input)
ESD	Exceeds +/- 8kV Air Discharge and +/- 4kV Contact Discharge
Controller Options	Serial RS-232

## Optical

Transmission of Visible Light	Up to 92% @ 550 nm
Surface Finish	Anti-glare finish

## Mechanical

Sizes	Standard flat: 8.4" (213.3mm), 10.4" (264.1mm), 12.1" (307.3mm), 15.0" (381.0mm), 18.1" (459.7mm)
Surface Hardness	Glass front. Mohs hardness rating of 6.5. The touch screen will continue to operate with scratches on front surface

## Environmental

Vibration (Operating)	5-57 Hz, 0.015" (p-p), 58-2000 Hz, 2.5G
Shock (Operating)	30G peak (pulse duration 11 +/- 1ms)
Humidity	Maximum 95% RH (non-condensing) up to 60 degrees C
Operating Temperature	-20°C to 70°C for touch screen, -0°C to 70°C controller
Storage Temperature	-40°C to 85°C for touch screen and controller
NEMA Rating	NFI touch screen will not prevent an application from achieving a NEMA 4X (IP66) seal, if integrated properly

## Reliability

Chemical Resistance	Resistant to chemicals that do not affect soda lime glass
Impact Resistance	Meets UL/CSA 60950 and CSA Ball Drop Test ball drop test; (0.5kg, 50mm diameter, ball drop from height of 1.3m)
Warranty	One year

## Near Field Imaging with Vikuiti™ Solar Reflecting Film

Transmission of Visible Light *	89% @ 550nm
Reflection of Infrared Light *	71% @ 1085nm
Sizes	10.4" (264.1mm), 12.1" (307.3mm), 15.0" (381.0mm)

\* The values shown are averages and have a tolerance of +/- 2%



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