



## Ultra Specification 5 Wire Resistive Flexible Glass Armored Resistive Touch Screen



### ULTRA touch screens are a revolutionary design in touch screen sensors

With the use of advanced materials engineering, AD Metro has been able to produce a very flexible polymer/glass lamination that makes up the skin that used in place of the polymer-only skin of standard resistive type touch screens. The laminated polymer/glass membrane is so tough it can take severe hammer blows without being damaged. This means that ULTRA remains a pressure activated technology, which is highly preferred, but without the drawback of a polymer plastic outer membrane which can be easily damaged. It also acquires all the benefits of the other two most popular hard glass technologies but without their profound deficiencies. It will, for instance, continue to operate perfectly even when deeply scratched. It also has an inherent safety feature. If the base glass is broke for any reason, the glass shards are contained internally by the outer polymer/glass membrane which remains intact. It is the best choice for US Federal Section 508 applications. ULTRA is available in the most popular size formats and custom size are available. For shatter proof substrate versions, polycarbonate and tempered glass versions are available.

### Target industries for touch screen application

- Industrial
- Medical
- Public Kiosks
- Military
- Hand Held



## Technical Data Touch Screen

Touch Screen Type	Glass Armored 5 Wire Resistive
Touch Screen Sizes	<u>6.5" to 20.1"</u>
Touch Activation Force	<u>85 grams</u>
Positional Accuracy	$\pm 2,0$ mm
Light Transmission	<u>85%</u>
Finish	<u>Anti-Glare (100 <math>\pm</math> 15 Gloss units) or Polished Clear</u>
Touch Screen Surface	Borosilicate Glass
Touch Screen Surface Hardness	7 Mohs
Sensor Thickness	1,0 mm & 3,54 mm ( <u>thicker sizes available</u> )
Cable Type	Polyester or Capton Flex Circuit Cable
Cable Termination	5 pin Amp Latched 0,1" centers or ZIFF style
Sensor Life	<u>225 Million touches per point</u>
Chemical Resistance	<u>Impervious to all chemicals or solvents that do not attack glass</u>
Operating Temperature	<u>-30°C to 80°C for screen sizes up to 10.4"</u>
Operating Temperature Touch Screen	<u>-10°C to 80°C up to -30°C to 80°C for sizes bigger than 10.4"</u>
Storage Temperature Touch Screen	-40°C to 90°C
Touch Screen Warrenty	5 Years

## Preassure activated touch screen technology

The Ultra touch screen is a pressure activated hard glass touch sensor technology that may be operated with any object that can apply as little as 85 grams of touch force. Bare hands, heavy gloves, fingernails, pens or pencils, any kind of stylus will all work with Ultra touch screens



## Moisture and dirt resistable touch screen

The ULTRA touch screen is not affected by any kind of dirt contamination which makes it highly desirable in unattended kiosk applications. It is not affected by moisture or water droplets and can even operate submerged !

## Low temperature resistant touchscreen

The ULTRA touch screen has an all glass outer construction which makes it impermeable to gas or vapor. It will operate even when completely frozen. ULTRA has been subjected to rigorous environmental testing and is expected to be endorsed for outdoor use in any weather or temperature extreme.

## High impact touchpanel

The ULTRA touch screen technology has a tough glass surface which is impervious to any chemical that does not attack glass. ULTRA is impact resistant and can withstand heavy blows when used with a temperate back plate. Unlike Surface Acoustic Wave and Capacitive sensors, ULTRA will tolerate surface damage and will continue to operate perfectly even when deeply scratched with a diamond point glass cutter.

!touch\_screen\_hardness\_test.jpg|thumbnail!