

# Capacitive Touch Screens

## specification sheet

### Technical specifications

#### Elektrical

Resolution	2048 x 2048
Accuracy	<1.5 mm
Calibration	not necessary
Activation	multitouch, single touch
Scan rate	< 10 ms
Contact bounce	< 20 ms
Isolation resistance	> 20mOhm @ 25 Volt
Operating voltage	2.5 - 5.5V
Operating power	max. 200 mW
Controller	board, chip-set or firmware
Interface	I <sup>2</sup> C, SPI, USB, RS232
Software driver	most common operating systems

#### Mechanical

Actuation	finger, finger with glove
Actuation force	no force needed
Surface material	1 - 6mm glass, 0.18 - 3 mm polyester, polycarbonate, acrylic
Surface hardness	very good
Chemical resistance	very good
Assembly	distance sensor - display > 0.2 mm
Tail bend radius	R > 2 mm

#### Climatical

Operating temperature	-25°C to +70°C
Storage temperature	-40°C to +85°C
Relative humidity	0°C at 90% RH, no condensation
Water resistance	can work with water
UV resistance	special filter required

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### Optical specifications

Projected, capacitive Touch Screens with glass, polyester, polycarbonate or acrylic surface.

#### Optical

Transparency till 88% ASTM D1003-92

Surface antiglare or gloss

#### Visual

Control distance 50 cm

Control angle 45°

Control time 5 seconds

Control light 500 Lux daylight

Control background black and white surface

Scratches in visual area 4 categories,  
visual area 6" Zoll / 6"-11"Zoll / 11"-15"Zoll / 15"-24"Zoll

Particles in visual area 4 categories,  
visual area 6" Zoll / 6"-11"Zoll / 11"-15"Zoll / 15"-24"Zoll

Error type: Visual scratches and Particles	Max. size	Max. in visual area			
		6" inch	6-11" inch	11-15" inch	15-24" inch
A Scratch	≤ 1mm long	2	3	4	5
B Scratch	1 - 3mm long	2	3	4	5
C Scratch	3 - 5mm long	1	1	2	3
D Scratch	5 - 10mm long	0	0	1	2
E Particles	≤ 0.3mm diameter	2	3	4	5
F Particles	> 0.3mm diameter	0	0	1	2