

Projected Capacitive Touchscreens

Specification sheet

All touchscreen constructions are custom made; customer application specifications can be agreed.

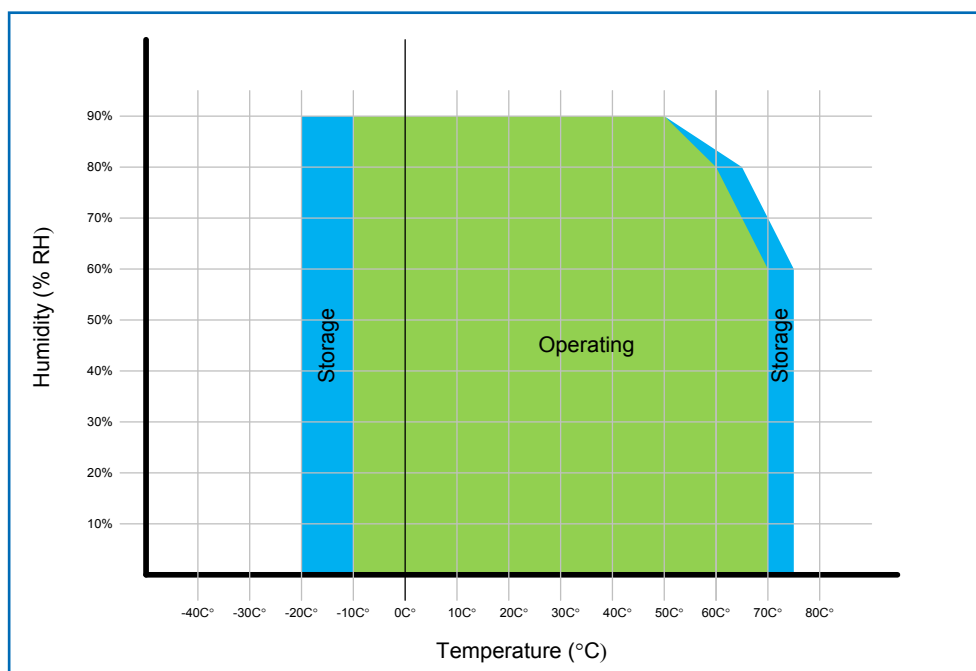
	Touchscreen
Diagonals	From 7" up to 24", custom designs possible
Coverlens thickness	1.1mm ~ 10mm glass 0.18mm ~ 5mm polycarbonate, polyester
Tail length	≤100mm, other tail lengths on request

	Electrical	Test procedure
Channel resistance	≤30k Ohm (Controller depending)	
Insulation resistance channel to channel	≥20MΩ @ 25Vdc	ASTM F1689-05
Operating voltage	3.5V ~ 5.5V	
RC value	≤1.3μs	

	Interface Electronics
Resolution	Up to a maximum of 4096 X 4096
Accuracy (pitch ≤ 6mm)	1point line drawing; ±1mm offset 10mm when drawing 10 mm line <i>Performance is sensor design depending</i>
Calibration	Only one time software calibration needed
Interface	RS232 No parity, 8 data bits, 1 stop bit, 19200 bps USB 1.1 full speed. Default USB-HID supported I2C 100k/400k Hz
Power requirement	3.5V ~ 5.5V, typical 5V (powered by USB)
Power consumption	Active mode 50-90 mA Idle mode 0.5-5 mA Sleep mode ≤0.5mA
Channels	Controller type depending. Up to 78 x 127
MultiTouch	4-16 touches
Response rate	Single / Multi touch; >100 points/sec
Response time	≤25ms
UL	Certified
CE	Certified
Software drivers	Software drivers are available for most common operating systems.
EMC: RS specification CS specification EFT	IEC61000-4-3: 30 V/m Criterium A (controller depending) IEC61000-4-6: 10 Vrms Criterium A IEC61000-4-4: 1~2kV <i>Possible to reach. Application and construction depending</i>

Depending on your requirements and technical priorities, your application engineer will advise the best suitable controller brand and type.

	Environmental	Test procedure
Temperature	Accordinging diagram	IEC 60068-2-14 Nb (-20°C / +75°C, 50%RH, 3hrs, 6 cycles)
Humidity	Accordinging diagram (No dew condensation allowed)	IEC 60068-2-30 (+55°C, 93%RH, 9hrs, 2 cycles) IEC 60068-2-78 (+40°C, 93%, 10 days)



	Durability	Test procedure
Surface material	Glass, Polycarbonate, Polyester	
Surface hardness	3H ~ 7H	Pencil hardness
Surface finish glass	Float / anti-glare coated / anti-glare etched	
Surface finish polyester	Gloss / anti-glare	
Operating force	Typically between 5-50 gram	
Point activation life	>50 million activations	
Recommended stylus	Conductive only	
Bend radius flex tail	2mm radius recommended for Kapton tail material	
Tail clearance	The Kapton tail can be in contact with, non sharp, grounded housings or metal work. The Kapton tail should be kept away from frequency carrying signals. The tail should remain in fixed position (no movements) during operation of the Touchscreen.	
Glass strengthening	On request toughened (Chemically / Thermal)	
Chemical resistance	There are a large variety of chemicals available in the market. There is no standard list available. Resistance of a specific chemical can be informed at the manufacturer of the coverlens.	

	Optical
Visual appearance	According "Visual Acceptance Criteria" SCHURTER Electronics B.V.