



## Projected Capacitive Touch Solution (Film / Film Sensor)

Higgstec **Projected Capacitive** touch screens offer a smooth and responsive touch experience while maintaining excellent reliability and durability. Previously popular for consumer and commercial applications, PCAP touch is increasingly being adopted for use in industrial, ruggedized, medical, automotive and marine applications due to improved electromagnetic compatibility, water resistance and versatile input possibilities.

Our **Film / Film Sensor** solution is constructed from two layers of ITO-coated PET film, covered by a protective glass (soda lime, Corning® Gorilla® glass or others) or plastic lens (PMMA, PC etc.) that can be customized to your product's design and feature special coatings (anti-glare, anti-reflection, anti-smudge, anti-bacterial), different thicknesses, chemical strengthening or thermal tempering to meet your strength, weight and cosmetic requirements.

### Benefits of Higgstec Film / Film Sensor PCAP

#### Operation

No pressing, light contact, very smooth and fast scrolling, multiple simultaneous touches and gestures.

#### Appearance

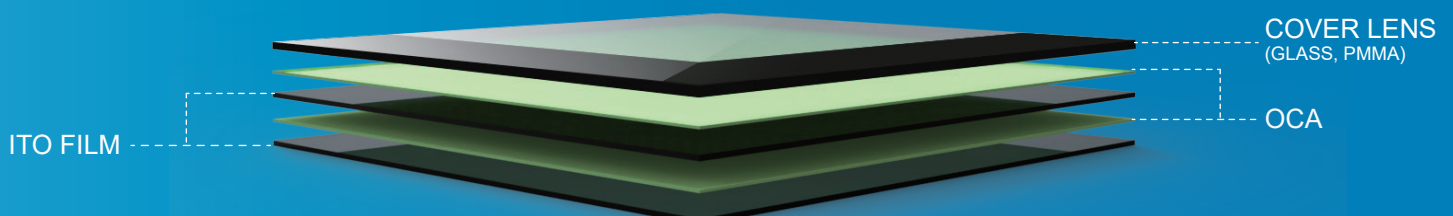
Flush surface, zero bezel design. Wide possibilities for customization of cover glass with printing or hotkey buttons.

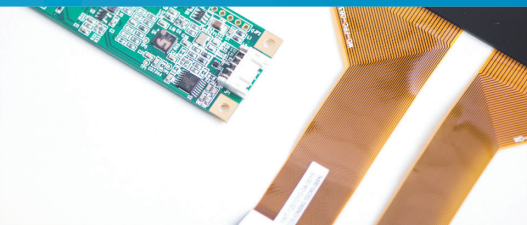
#### Mechanical

Film-Film sensor allows for excellent optical clarity, better safety, and greater durability compared to a glass sensor construction.

#### Customization

Wide flexibility to meet different customer requirements or environmental conditions.

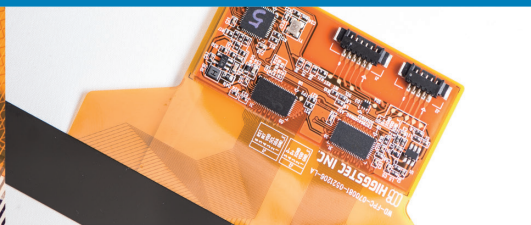




FPC tail with separate controller board option



Laser etching production process for ultra-thin border



Integrated COF (Chip On Flex) controller option


**TOUCH PANEL SPECIFICATION**

Size Range	3.5" – 32" (standard)	3.5" – 32" (customized)
<b>Optical</b>		
Light Transmittance	≥87% (Measured by BYK-Gardner)	
<b>Mechanical</b>		
Sensor Thickness	0.425mm typical or other thickness on request	
Cover Lens Thickness	0.7mm ~ 8mm typical or other thickness on request	
Tail Options	Separate controller board (FPC tail) or integrated controller on flex PCB (COF tail)	
Cover Lens Options	Soda lime, Gorilla®, Dragontrail™ or other glass types, chemically strengthened or thermally tempered treatment, PMMA, PC or other composite materials	
Cover Lens Treatment Options	Anti-glare, anti-reflection, anti-smudge, anti-bacterial coatings	
Other Customization options	EMI-shielding, privacy filter, vandal-proof, outdoor visibility with polarized glasses	
<b>Typical Touch Performance*</b>		
Input Methods	Finger, glove, passive or active stylus	
Number of Touches	10 points simultaneous	
Positional Accuracy	1pt ±1mm	
EMC	CS (IEC6100-4-6): 3~10Vrms, RS (IEC6100-4-8): 10~50V/m	
<b>Reliability</b>		
Operation Temperature / Humidity	-20 ~ +70°C	20%RH ~ 85%RH
Storage Temperature / Humidity	-40 ~ +80°C	20%RH ~ 90%RH
Daylight Exposure	Comply with ISO 4892-2 Cycle 1 * 1,000hrs	
Compliance	CE, FCC, RoHS, REACH	
Warranty	2-year limited warranty	
<b>Controller*</b>		
Interface	USB / RS232 / I2C	
Input Voltage	3.5 ~ 5.5v, Typical 5V	
OS Supported	Windows, Android, Linux, Mac, QNX	

\* Typical values; various controller solutions available