Analog Matrix Resistive

Higgstec's Analog Matrix Resistive (AMR) touch solution is a variant based on resistive touch technology that offers Multi-Touch capability. It is not only suitable in user scenarios such as with snow, water, thick gloves, but also suitable for environments with high electromagnetic noise interference. This unique touch solution has been widely used in applications for military industry, medical like MRI, rugged outdoors and vehicular usages.

The key substrates of Higgstec's AMR are the ITO (Indium Tin Oxide) Film and ITO glass. Additional surface treatments are available (anti-glare, anti-reflection, anti-smudge, anti-bacteria) to enhance its performance. Also, an extra BM cover lens may also be added to reach the best aesthetics or true flat design.
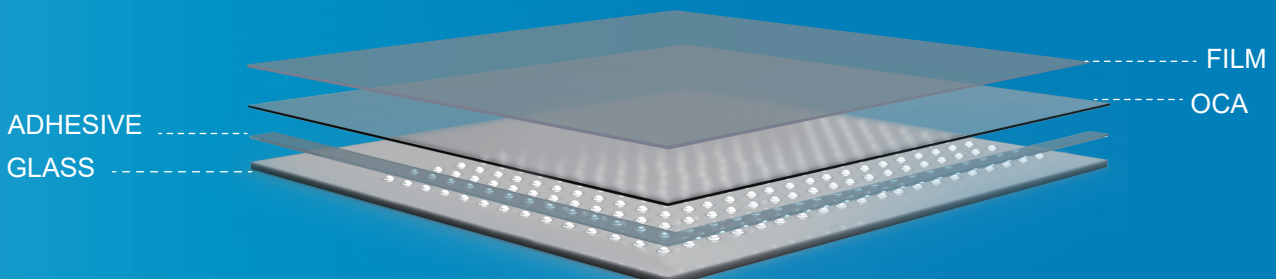
Benefits of Higgstec AMR

Operation

Supports 10-point touch and various operation modes: finger, glove, passive stylus. No false touch when the surface is with water or smudge. Configurable light activation force design to improve fluency.
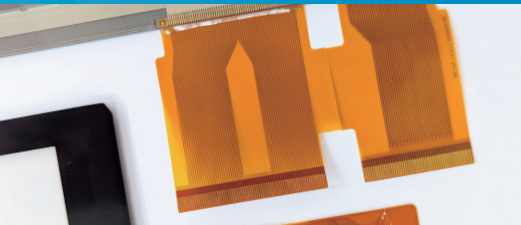
Appearance

An extra BM cover lens can be added to reach optimal true flat / bezel-free design.
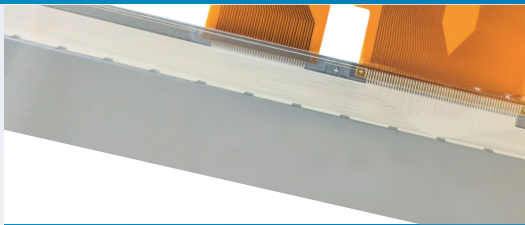
Customization

High flexibility to meet different needs and environment conditions. Customized product is compliant with military EMC standard (MIL-STD 810 / MIL-STD 461) or Windows Touch Certification (WHQL).
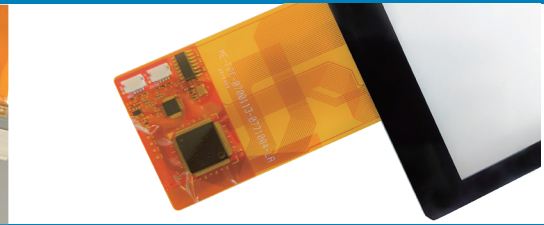
FILM
OCA
ADHESIVE
GLASS

FPC tail with separate controller option

Double-routed design, low resistance and excellent electrical performance

Integrated COF (Chip on Flex) controller option

TOUCH PANEL SPECIFICATION

Size Range	14.1" (standard)	3.5" – 21.5" (customized)
Optical		
Light Transmittance	≥77% (Measured by BYK-Gardner)	
Mechanical		
Tail Options	Separate controller board (FPC tail) or integrated controller on flex PCB (COF tail)	
Film Treatment Options	Anti-glare is typical or others upon request (anti-reflection, anti-smudge, anti-bacteria)	
Glass Options	Soda lime is typical, or others upon request	
Typical Touch Performance*		
Input Methods	Finger, glove, passive stylus	
Number of touches	10 points simultaneous	
Multi Touch Finger Pitch	Finger separation> 14mm	
Positional Accuracy	X≦2mm, Y≦2mm	
EMC	MIL-STD 810 / MIL-STD 461	
Reliability		
Operation Temperature / Humidity	-20 ~ +70°C	20%RH ~ 85%RH
Storage Temperature / Humidity	-40 ~ +80°C	20%RH ~ 90%RH
Compliance	CE, FCC, RoHS, REACH	
Warranty	2-year limited warranty	
Controller / COF*		
Interface	USB / RS232 / I2C	
Power Requirements	3.5 ~ 5.5V DC, 5V typical	
Supported OS	Windows, Android, Linux, Mac, QNX	

*Typical values, various controller solutions available