

Technology	Analog-resistive touch technology		Capacitive touch technology		Optical touch technology	Acoustic touch technology
Design	Polyester touch structure	Glass-film-glass	Surface-capacitive	Projective-capacitive	Infrared	Surface acoustic wave
Abbreviation	AR touch	GFG	S-CAP	P-CAP	IR touch	SAW
Method of operation	Upon touching the surface, two conductive ITO layers meet, causing a voltage drop (voltage divider).	Polyester film laminated in between two sheets of glass. Same functional principle, but with robust and scratch-proof surface	Touching causes changes in an electric field.	P-CAP uses a sensor pattern. Changes in the electric field are detected individually in each part of the pattern.	Touching interrupts the light beams.	Touching causes partial absorption of the wave energy.
Control mode • Finger • Glove • Touch pen	Yes Yes Yes	Yes Yes Yes	Yes No No	Yes Yes (with restrictions) No	Yes Yes Yes	Yes Yes No
Surface material	Polyester	Polyester	Glass	Glass	Glass	Glass
Touch operation mode	Single-touch control	Single-touch control	Single-touch control	Multi-touch control	Multi-touch control	Two-touch control
Typing frequency	+	+	+	+++	+	+
Positioning accuracy	++	++	0	+++	0	0
Light permeability	0	0	+	+++	+++	+++
Surface hardness (mech. sensitivity)	-	+	---	+++	+	0
Vibration resistance (mech. sensitivity)	+++	+++	+	+++	0	---
Chemical resistance	-	+++	--	+++	+++	+++
EMC sensitivity	+++	+++	---	---	-	+++
Sunlight resistance (UV sensitivity)	---	+++	-	+++	+	+++
Outdoor suitability (temperature sensitivity)	0	+++	0	+++	0	0
Dust/water tightness	+++	+++	0	+++	+	-
Gas tightness	+++	+++	-	+++	-	++
Cost efficiency	+++	0	0	++	--	--

+++ outstanding | ++ excellent | + good | 0 medium | - moderate | -- poor | --- unsuitable