Differences Between Resistive and Capacitive Touchscreens.

The vast majority of touchscreen devices today use either resistive or capacitive technology. We've discussed them before on our blog, but in case you missed it resistive touchscreens identify the origin of touch by pressing two layers together, whereas capacitive devices work by identifying the electrical charge produced by the operator. Today, we're going to take a closer look at resistive and capacitive touchscreens, revealing five key differences between them.

1) Method of Input

One striking difference between resistive and capacitive touchscreen devices involves their method of input. With capacitive devices, users are restricted to a single method of input: direct touch. But with resistive devices, users may control the device via direct touch, gloves, stylus and more. Because capacitive devices work by identifying the electrical charge produced by the operator, there must be a direct touch in order for the command to register.

2) Gesture

Although it requires direct touch to function, capacitive touchscreen devices support multi-touch controls. This is in stark contrast to resistive devices, which only support single touch. The use of multi-touch support allows for greater versatility in terms of control, making it the ideal choice for many industrial and commercial applications.

3) Production Cost

It typically costs more to produce a capacitive touchscreen device than a resistive device. Because of the increased production costs, the actual sale price is also higher. So if you're looking for an inexpensive touchscreen device, you may want to stick with a resistive model for this very reason.

4) Surface Material

While there are always exceptions to this rule, most capacitive touchscreen devices are made with a glass surface. Resistive touchscreens, on the other hand, are made with a synthetic plastic material. Glass allows for the operator's electrical charge to pass through and into the device, which of course is essential for the overall function of a capacitive device.

5) Water Resistance

Resistive touchscreen devices are more resistant to water, dust and debris than capacitive. This doesn't necessarily mean that they are waterproof (unless stated in specifications). However, you can expect a resistive device to hold up for a longer period of time in wet/humid conditions when compared to a capacitive device.