Industry's First Conductive Polymer Film Touch Panels from Fujitsu

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Durable Organic Material is Cost Efficient and Eco-Friendly

Fujitsu Components America, Inc., announced it will begin North American marketing efforts for new resistive touch panels that use an extremely durable conductive polymer film and cost less to produce than conventional resistive touch panels. An industry-first technology developed by Fujitsu Laboratories Ltd. and Fujitsu Component Limited, the custom touch panels will start sampling in early 2005 with production following in Q2 2005.

The touch panels use a pliable, transparent conductive polymer as the transparent electrode in place of the indium-tin-oxide (ITO) found in typical resistive touch panel films. Able to withstand 200,000 pen inputs with no structural degradations or resistance increases, the new touch panels are more durable than those using ITO film. They are also less costly and more ecologically friendly to produce than ITO-film touch panels. Applications include cell phones, PDAs, tablet PCs, and other pen-based devices where longer life and higher reliability are required.

To produce the touch panels in sizes ranging from 2.9 to 17 inches, Fujitsu developed a film coating process that is cost efficient and ecologically friendly. Using a roll coater, the liquid conductive polymer is combined with a water-based solvent and is applied to the PET film with very uniform thickness. This coating process eliminates the need for sputtered film and reduces production costs in high volume compared to ITO-film touch panels.

The new touch panels have similar conductivity and transparency properties as ITO-film touch panels. Using a patented molecular-orientation technology, Fujitsu was able to produce the conductive polymer material with 93 percent transparency over the 400-700 nanometer spectrum.

Pricing for the new conductive polymer touch panels has not yet been established.

According to Bruce DeVisser, product marketing manager at Fujitsu Components America, “Developing the conductive polymer touch panels is just one more step in Fujitsu’s commitment to improving resistive touch panel technology. Our developments in high-transparency, high-performance touch panels and new materials for reliable, long-life operation will allow resistive touch panels to keep meeting the increasing demands for touch input.”

Find the original press release here.