

## Press Release

### LG Innotek moves into the market for medium and large touch screen panels

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LG Innotek (CEO Ung-Beom Lee) introduces new medium and large touch screen panels (TSP) that the company will use to advance into the global market.

The company has successfully developed metal mesh touch screen panels optimized for medium and large screens, such as laptops and monitors. These screens feature faster response speeds than other 23 in. or wider screens on the market while retaining a thin bezel. These screens are also competitively priced.

Metal mesh TSP is a transparent product that uses a sensor circuit to detect touch. This mesh is made from metals such as silver and copper. Among the next generation technology for medium and large TSPs, which includes silver nanowires and graphene, metal mesh is considered to be the closest to commercialization.

#### ■ Increased response rate and price competitiveness with minimal bezel thickness

LG Innotek has enhanced response speeds by applying independently designed circuits. The touch sensitivity of these circuits is more than 30% higher than existing ITO TSPs, so they are suitable for touch screens of various sizes ranging from 13 in. to 50 in.

Furthermore, the company uses a high-tech printing method to secure a competitive price. This method instantly prints complex touch sensor circuits, so it cuts down on production costs by avoiding the use of costly rare metals and reducing the number of main processes by a third.

LG Innotek can also produce a 23 in. TSP with an ultra-thin bezel, so the borders around the panel are 5 mm or less. By minimizing the borders on laptops or monitors, manufacturers can fit larger screens into devices of the same size.

#### ■ The company is taking on the global touch screen panel market through a two-pronged approach.

By developing metal mesh TSPs, LG Innotek was able to strengthen their brand for global competition and create a product lineup that ranges from small to medium and large screens.

The company plans to take on the market with a two-pronged strategy. The first part of the plan is take over the budget market by introducing high-performance G2 products in the small market for smartphones and premium devices, while the second part of the plan is to advance into the medium and large market for tablet PCs and laptops through metal mesh products.

Last year in August, LG Innotek received industry attention when it became the first in the world to successfully mass produce cell-type G2 products in the field of small TSPs for smartphones. It secured a stable yield rate and is currently the supplier to many global mobile phone manufacturers.

G2 TSPs include touch sensors integrated into a layer of fiberglass that protects smartphone screens. This allows for remarkable resolution with high response speeds and accuracy because no separate touch film is necessary.

According to LG Innotek, "In the future, more and more devices will include touch panels." The company also said, "since we have secured excellent performance, a diverse product lineup, a stable supply capacity, as well as price competitiveness, our company plans to actively advance into the TSP market, which has a high potential for growth."

According to the market research company IHS (formerly known as Display Bank), the TSP market is expected to double in size from last year's 18.2 to 38.7 billion dollars by 2016.

As global PC manufacturers are poised to drastically expand the number of products that support touch functions, the market growth is expected to accelerate rapidly. Up until the first half of this year, touch functionality was mostly limited to tablets and convertible PCs (laptops combined with tablets), but the phenomenon began spreading to products such as laptops and all-in-one PCs during the second half of the year.



Image 1) LG Innotek staff members present a metal mesh TSP optimized for the medium and large screens in laptops and monitors. Despite the size of the 23 in. screen, the company was able to secure fast response speeds and a competitive price.