

Abbreviated to OGS, this is the latest mutual capacitance touch panel (CTP) technology, which combines the glass-cover-lens with a CTP in one single Glass substrate.

Yeebo Electronics Technology manufactures this product on a new automated production line in Jiangmen. (Same building as our LCD, TFT robotic lines)

As Yeebo can offer both the processing and principal materials in-house, we can guarantee long term availability.

Most significant is that Yeebo produces in-house ITO (Indium-Tin-Oxide) coated glass with highly controlled sheet resistance.

Yeebo has heavily invested in 3rd generation state of the art, automated inline ITO coating sheet processing. With the unique technology of OGS, we can offer a real cost advantage over other CTP technologies. The technology is highly flexible, especially for full custom designs, combining touch panel and cover lens in a single sheet. This avoids the need for optical bonding between sensor and cover lens further reducing cost. The form factor of the OGS can be manufactured to suit your application. The maximum external dimensions are 480 x 340mm. The active area of the CTP area can be specified within a specified border within the outline dimensions.

Colour and graphic printing and circular / rectangular cutouts can be realized enabling mechanical actuators, camera lens etc.

The electrode structure and interconnection of the OGS are partly made by a photolithographic and screen printing process. Consisting of ITO – electrodes, through plating dots, isolation layers and interconnections.

To achieve the highest resolution touch experience the ITO electrodes are only <5µm wide.

Based on this capability the complex bridging inside the capacitive touch area can be avoided.

As the ITO coating process is in house, Yeebo can optimise and adjust the ITO sheet resistance to around 5 ohms per square.

The interconnection between the individual rows- and column-electrodes of the CTP-sensor are made, outside of the active touch area, utilising silver-plated tracks, which are through plated by carbon dots. (Similar to a PCB construction)

Consequently OGS are best fitting for TFTs in the range of 1.3" up to 15.6" diagonal but also can be applied to passive LCD (e.g. FSTN or VA).

Next to fully custom made designs we can offer some standard products for 1.3" up to 15.6" diagonals.

System requirements can be matched to Android, Microsoft, and Linux etc. The CTP controller IC being mounted on the FPC. The glass substrate can be from 1.2mm to 1.8mm thick and coming soon we will soon release up to 3.4mm thick. Maximum dimensions are up to 15.6 inch diagonal. The glass substrate can be chemically hardened or tempered with a variety of surface finishes.

A pencil can be used with certain controllers.

Touch sensors 30 to 68 channel.

Multi touch 2-10 fingers