



In-Cell Series Display Module

Interface: MIPI/RGB



Application: Smart home, Charging pile, Monitoring System, Portable devices, Instruments

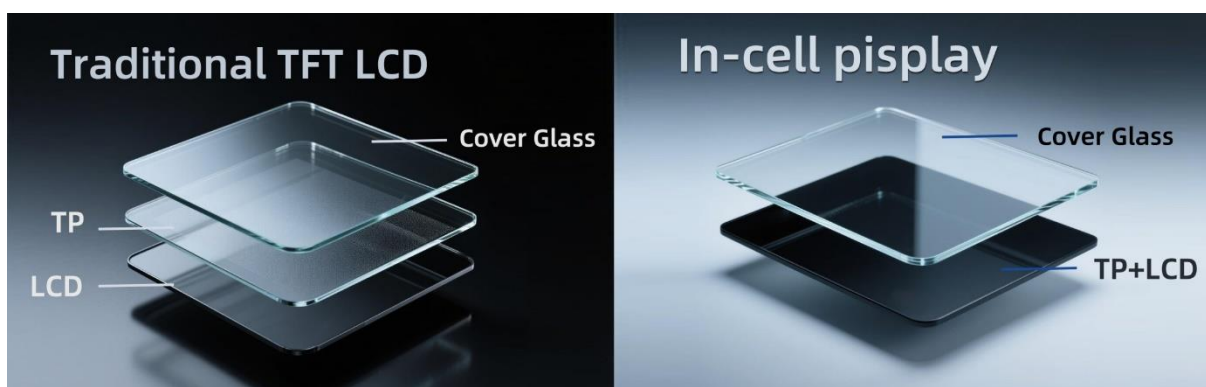
Cost-Effective Choice: TDO Launches In-Cell Series Display Modules

As smart devices become more popular and advanced, users are demanding better design, sharper displays, and smoother experiences. The trend toward ultra-thin, lightweight, high-performance gadgets is pushing display technology to new heights—technology that's constantly evolving to keep up.

Over the past decade, LCD technology has seen continuous innovation, moving from traditional anode processes to various advanced solutions. To meet the market's need for thinner and more efficient screens, various structural approaches have been introduced, such as OGS (One Glass Solution), GFF (Glass-Film-Film), and On-Cell. Among these, In-Cell technology—where the touch sensor is integrated directly into the LCD panel—has quickly become a leading solution thanks to its ultra-thin profile, excellent display quality, and cost advantages.

In-Cell Technology: The Ultimate Thin Design Breakthrough

- **Ultra-Slim and Space-Saving**



Traditional LCD screens are often thick due to layered constructions. In-Cell technology embedded the touch sensor into the display itself, cutting down on layers and reducing overall thickness by about 30%. This makes devices lighter and more streamlined.

- **Responsive, Smooth Touch**

Because the touch signals are processed directly through the LCD layer, response times are significantly faster—over 50% lower latency than traditional screens. Whether you're swiping quickly, zooming in on images, or playing games, the experience feels seamless and responsive.

- **Superior Display Quality**



Without external layers or air gaps, more light passes through the display, resulting in higher brightness, better contrast, and wider viewing angles. Visuals are sharper, clearer, and more vibrant, especially outdoors or under strong lighting conditions.

- **Cost-effective**

By simplifying manufacturing and eliminating external touch modules, In-Cell displays reduce production costs by roughly 15–18%. Fewer layers mean lower energy consumption, leading to longer battery life and more efficient devices.

TDO's In-Cell Series

TDO's In-Cell series supports popular MIPI and RGB interfaces, ensuring compatibility across a broad range of platforms. These modules are ideal for smart home control panels, charging stations, energy storage monitors, portable devices, and professional instruments. Available in various sizes and resolutions, our products are designed to meet diverse customer needs—and we're constantly working to expand and improve the lineup.

Size	Model No.	Resolution	Interface
3.5 "	TL035HVV78CT-B1922A	320*480	MIPI
4 "	TL040WVS26CT-B1882A	480*480	MIPI
4 "	TL040WVS27CT-B1904A	480*480	RGB
4.3 "	TL043WV01CT-B1884A	480*800	RGB
4.3 "	TL043WV02CT-B1900B	480*800	MIPI
5 "	TL050FWV30CT-P1924A	480*854	MIPI
10.1"	TL101WUV02CT-M1894A	1200*1920	MIPI