

August 19, 2021

Dear Valued Customers:

Introducing NEW: PDLC (Polymer Disperse Liquid Crystal) Technology, also called PNLC (Polymer Network Liquid Crystal).

PDLC adds polymer to the liquid crystals to present a new display effect in a transparent display.

- Off-State: Without electric field, the liquid crystal long axis is perpendicular to the surface, and the light passes through. -> **Transparent! (89% transmission)**
- On-State: With electrical field applied, the liquid crystal molecules are scattered in all directions.
 - -> Opaque! (83% transmission)







Features and Advantages of PDLC:

- True Transparent Display Effect
- Excellent viewing angles. The brighter the ambient light, the darker the background color, the better the contrast rate. (Contrast Ratio on black background is 3.6)
- Very Fast Response: 19ms
- Low Power Consumption: 3.3V/1mA
- Drive Voltages: Positive 2.5-5V; Negative 6-10V
- No Mura Effect: Pressure on the screen does not distort the image
- Budget Friendly: Fixed segment display with low cost and no polarizers
- Customizable Displays and COG Modules MCU (8080/6800/SPI/IIC)

Please contact us (info@orientdisplay.com) for further information and questions.

Orient Display Team