



ORIENT DISPLAY

MAKE THINGS POSSIBLE

Sept 27th, 2023

Dear Valued Customers:

Introducing **Reflective/Transflective TFTs**. These displays offer numerous advantages, including ultra-low power consumption with no need for a backlight, exceptional sunlight readability, support for a wide variety of colors, fast response time, wide temperature reliability, and eye-friendly characteristics by reducing exposure to blue light. They also provide a paper-like or painting-like visual quality, making them a versatile and energy-efficient choice for applications ranging from smart retailing to healthcare devices and beyond.

Application

- Education (E-tablet, drawing pad, 3D printer, kids computer)
- Transportation (bicycle/yacht/motorcycle speed meter, charging station, parking meter, ticket vending machine)
- Wearable (smart watches)
- Smart Retail (electronic shelf label, POS, self check-out, smart shopping cart)
- Healthcare (blood glucose meter, oximeter, infusion pump, patient monitor)

Ultra Low Power

Reflective/transflective displays achieve Ultra Low Power by implementing low-power scanning, eliminating the need for a backlight, and reducing power consumption from approximately 20% to a mere 0.05%, leading to extended battery life and a lifespan exceeding 5 years, making them highly energy-efficient and durable for a wide range of applications.



2.13" Electronic Shelf Label



5" POS

Sunlight Readable

Reflective/transflective displays harness ambient light to render content, making them exceptionally well-suited for outdoor applications where direct sunlight or varying lighting conditions are common, ensuring readability and visibility without relying on additional illumination sources.

Variety Color

Reflective/transflective displays offer a wide range of color options, including 2, 4, 8, 64, and even 16.7 million colors, catering to diverse applications like electronic shelf labels, billboards, bus stops, e-readers, and various colorful devices, thus enhancing the user experience through vibrant and visually engaging content.



10.1"/15.6" Payment Terminal



4.2" Sphygmomanometer

Fast Response Time / Refresh Rate

The fast response time of reflective/transflective displays enables them to support features such as flashing highlights and dynamic information displays without requiring additional power consumption, ensuring energy efficiency whether displaying static or dynamic content.

Wide Temperature Range

Reflective/transflective displays demonstrate remarkable durability with a wide temperature range from -30 to 80 °C and strong UV resistance (Glass LCD base), making them suitable for use in diverse environmental conditions and outdoor settings where temperature extremes and UV exposure are common.



5" Motorcycle Speed Meter



1.54" Oximeter

Eye Care

Reflective/transflective displays offer two effective solutions to mitigate the potential health risks associated with blue light emissions from backlights commonly found in displays: they either completely eliminate the need for a backlight in reflective LCDs or employ advanced optical designs such as front light or backlight modifications, to shift the blue light peak, reducing the harmful effects on the eyes.

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

Orient Display Team