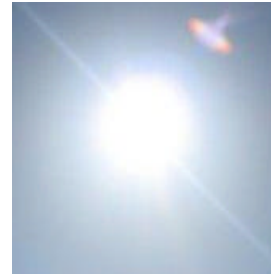


TECHNICAL BRIEF

BY: AZD ENGINEERING

Touch Panel Solutions



Adding a touch screen to a color TFT panel is a challenge in direct sunlight conditions, because it normally adds glare and reduces the brightness of the backlight. To increase sunlight readability, AZ Displays offers a unique proprietary touch screen technology.

Sunlight Readable Touch Panels

In addition to the ITO (Indium Tin Oxide) layer in regular touch panels, sunlight readable versions carry many layers of A/R coatings, up to 7 layers are added during the fabrication process. Such coatings are essential in order to help absorb and reduce the sunlight's glare/reflection. Because these A/R coatings slightly reduce light transmission, the sunlight readable versions carry additional polarizers to help increase brightness and the overall transmission rates of the touch panel. As a result, adding a sunlight readable touch panel to any display will help increase sunlight readability of the entire display module. In many types of applications, the sunlight readable touch panel acts as a filter for the display carrying low reflectance ratios while maintaining the overall brightness.

- Viewable in All Lighting Conditions
- Low Reflective Efficiency: <5%; <7%
- Transmission Rates: ~40% (for optical & air-gap bonding)
~80% (for air-gap bonding)
- Extended Temperature: -30~75 degrees C
- Touch Technology: 4-Wire and 5-Wire



New Product Release

AZ Displays announces availability of sunlight (SR) 4-wire touch screens of 80% transmittance for its standard color TFT LCDs (5-wire versions are also available):

- SR4-035F-09N-01 for 3.5" TFT panel p/n's PD035OX1 and PD035VX2
- SR4-050F-05N-01 for 5.0" TFT panel p/n PD050VX2
- SR4-058F-09N-E for 5.7" TFT panel p/n's PD057VU1 and PD057VU2
- SR4-064F-04N-04 for 6.4" TFT panel p/n's PD064VT2, VT4, VT5, VX1
- SR4-0104F-50N-01 for 10.2" TFT panel p/n PD102WX1
- SR4-0104F-41-D for 10.4" TFT panel p/n's PD104SL5, SL7, VT2