



OPTICAL SHIELD

Opto-Enhancement substrates include glass, polycarbonate, acrylic, or any other optically clear overlay material placed in front of the LCD. They are made of different compounds or coating to enhance the color, sunlight readability and viewing angle of LCD panels.

The displays bonded or laminated with our shield material offer superior optical characteristics.

BENEFITS | OPTICAL BONDING

IMPROVED OPTICS AND GLARE REDUCTION

(HEA2000 – Antireflective Thin Coating film)

Optical Bonding reduces or eliminates reflection from internal and external light sources. When combined with an Anti-Reflection front surface it is possible to dramatically reduce glare and increase light transmission from the assembly yielding a most satisfying and accurate viewing experience.

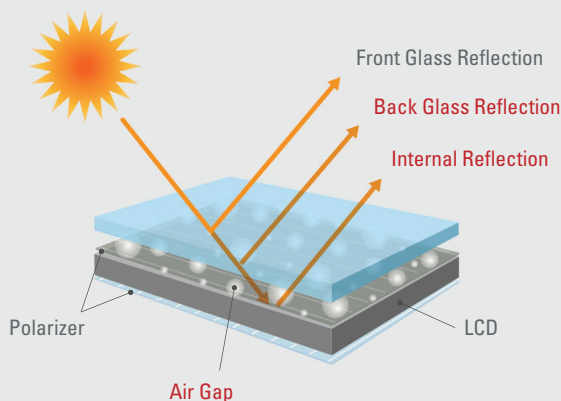
POLARIZER PROTECTION

The front surface of a display has a soft plastic “polarizer” film material that can be easily damaged. HEA2000 film is a high-quality surface hard coat superior to OEM polarizer film. Should the HEA2000 film be damaged during practical use, it can be removed and re-installed renewing the product.

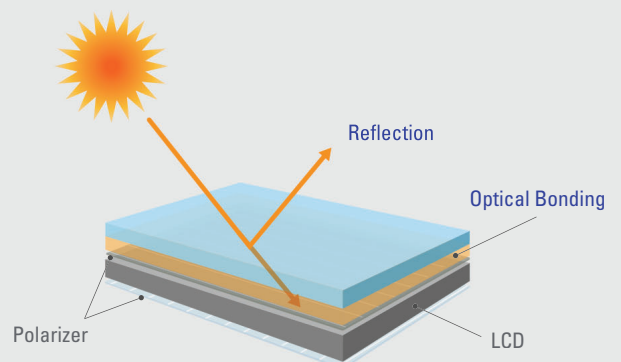
REDUCED POWER

In high brightness ambient environments, an optically bonded display allows the user to dim down the backlight. In outdoor sun light environments, the film reduces reflection from 12 to 1.5%. This results in a similar effect on contrast ratio as going from a brightness level of 500 to 3,500 nits. Additionally, the system power consumption can be reduced and along with internal system heat generated which must be removed from the assembly.

WITHOUT OPTICAL ENHANCEMENT



WITH OPTICAL ENHANCEMENT





BENEFITS | O-FILM

IMPROVE VIEWING ANGLE

In a TN display most light travels in one direction where it becomes visible to the Viewer. Our O-Film lamination technology allows light to pass in all directions providing a wide viewing angle and minimal color shift. The performance enhancement is slightly less than an IPS display which may be a lower cost solution for many display applications.

