



PROTECTIVE SHIELD

Optically Bonded displays provide superior optical characteristics and mechanical robustness.

Optically Bonded "Cover Glass" can be materials such as glass, polycarbonate, acrylic, touch screens, or other optically clear overlay material placed in front of an LCD panel. If needed, integrated Heaters and EMI/RFI shields can be integrated into the lamination stack up providing additional features for more extreme applications.



Display Protection

A display front surface typically is a soft plastic film material. This front surface is easily scratched, even from routine cleaning. With optical bonding a protective "cover" is placed on the display. Optically bonded displays can be incorporated into a weather resistant system. IDS has bonded cover glass for products used by underwater divers.



Safety

An optically bonded display will help contain materials in the event of breakage (an impact directly to the display or crash in a vehicle).



Dust and Moisture

By eliminating the gap between the LCD and the cover glass, dust and moisture cannot accumulate.



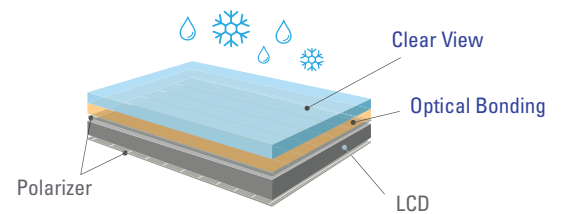
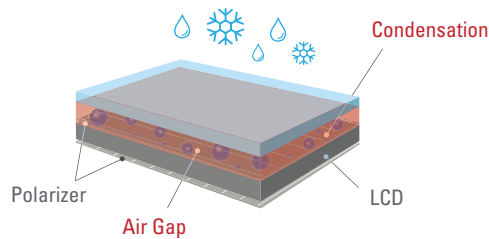
Shock & Vibration

It has been demonstrated that an optically bonded display is superior at resisting the effects of mechanical shock and vibration

WITHOUT OPTICAL BONDING

WITH IDS OPTICAL BONDING

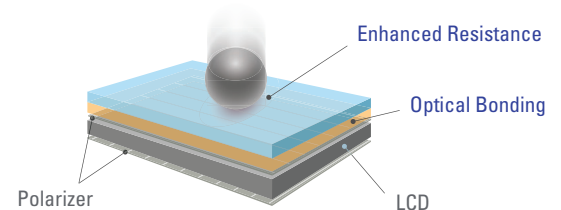
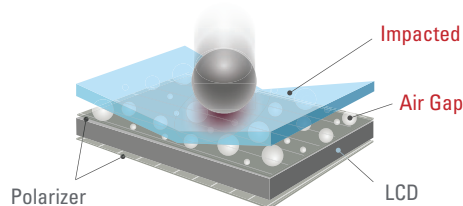
Prevention



WITHOUT OPTICAL BONDING

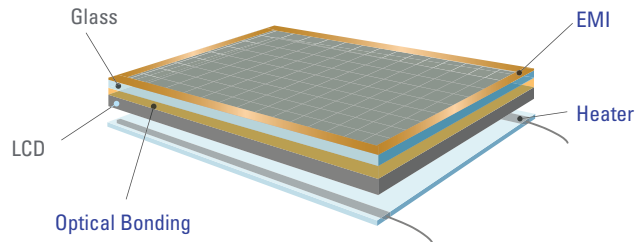
WITH IDS OPTICAL BONDING

Protection





EMI & Heater



OLEOPHOBIC

Glass is an easy-to-clean surface. Its low wettability allows liquids to bead and wash away. The coating is both oleophobic and hydrophobic designed to reduce buildup of contaminants invisible to the eye, repel oil, water soap scum, limescale and salt residue. It can be cleaned without the need for harsh chemicals.

ABRASION RESISTANCE

After 8,000 rubbing cycles, water contact angle maintains at 100 degrees.

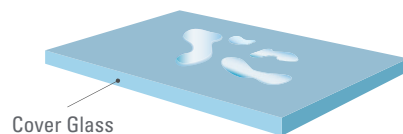
- Test Condition:
- Abrasive material: #0000 steel wool
- Load: 0.5 kg/cm²
- Stroke: 2 cm
- Speed: 40 rpm

RECOMMENDED CLEANERS

Filtered water and/or mixture with isopropyl alcohol

Anti-Smudge
Oleophobic resistance

WITHOUT ANTI-SMUDGE



WITH ANTI-SMUDGE

