Transparent Conductive Coatings (ITO/IMITO)

Abrisa Technologies specializes in the design and PVD coating of transparent conductive Indium Tin Oxide (ITO) and Index-Matched ITO (IMITO) for use on heated windows, bio sample test platforms, EMI shielded display glass, transparent electrodes used for LC switching, and other electro-optic applications. Designs can be optimized for enhanced throughput performance in air or index matched to other mediums, as well as address a wide range of performance attributes as broad or custom viewing angles, custom spectral ranges, and challenging use environments.

ITO/IMITO Heaters for Imaging

Heated ITO/IMITO windows are used for digital imaging and displays to prevent fogging and ice build-up which can obscure viewing and image capture. Anti-reflection properties, bus bars, wire bonding, and connectors for electrical connectivity, filter performance, graphics, and oleo/hydrophobics can be added for Ready-to-Install solutions.

- Single Layer, Accessible & Buried ITO/IMITO
- IMITO – Index-Matched for Bonding
- Throughput: Enhanced, Color Neutral/Bias Adjusted
- Low CTE High Clarity SCHOTT BOROFLOAT® 33

ITO/IMITO EMI Shielded Display Glass

Electro-Magnetic Interference (EMI) shielding display filter glass is used on cockpit displays, medical instrumentation, and other devices sensitive to external electric field interference and/or to prevent similar from emanating while still allowing high throughput viewing or optical signal transmission to occur.

- Single Layer, Accessible & Buried ITO/IMITO
- Sheet Resistance Down to ≤ 3 Ohms/Square
- Low Diffuse Reflection, Sunlight Readability
- Full Perimeter Bus Bars - CrNiAu, Ag Frit, Ag Epoxy

ITO/IMITO for Transparent Electrodes/LCoS

ITO/IMITO is an excellent choice for use as a transparent electrode layer on LCoS and other LC based constructs or devices in need of electro-optic properties with optical transparency. Typically made with accessible IMITO on glass or silicon wafers as part of the construct for an optical switching chip or display.

- Single Layer, Accessible ITO/IMITO
- Visible, NIR Diode, Telecom, Broadband
- High Throughput, Low Scatter Coatings
- Wafers, Photolithographic Patterning (Special Request)

Popular Applications of Use

Abrisa Technologies offers many transparent and conductive coating solutions incorporating our ITO/IMITO and Indium Molybdenum Oxide (IMO) coatings, or cut to order Fluoride Tin Oxide (FTO) coatings on float glass to support applications as:

- EMI Shielded Displays for Aircraft/Instruments
- Anti-Fogging Heated Windows for Outdoor Imaging
- Electro-Optical Switching, Telecom, Deflection or Targeting
- Controlled Temperature Bio-Sample Surfaces
- Static Energy Dissipation for Satellites & Sensors