Sensor and Scanner Window Solutions

Imaging • 3D Metrology and Mapping • Obstacle Avoidance

Abrisa Technologies, a member of HEF Photonics, is a globally recognized technology glass fabrication and optical thin film coating company with expertise in high volume manufacturing and engineering capabilities, delivering Total Solutions that provide excellent performance, fitness-for-use and economies of scale.

Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.

Sensor and Scan Window Coatings:

- **Anti-Reflection Visible (425nm-675nm)**  
  Ravg < 0.5% (AOI = 0º-30º)

- **Anti-Reflection Visible-NIR (425-950nm)**  
  Ravg < 1.0% (AOI = 0º-30º)

- **Anti-Reflection SWIR (900-1700nm)**  
  Ravg < 1.0% (AOI = 0º-30º)

- **Broad Angle Anti-Reflection Laser Line**  
  Ravg < 0.5% (AOI = 0º-50º)

- **Ultra-low Anti-Reflection NIR Diode**  
  Ravg < 0.1% (AOI = 0º-30º)

- **Cut Off, IR Blocking Filter/Mirror**  
  Visible Transmission, NIR Blocking

- **Cut On, VIS Blocking Filter, Mirror**  
  Visible Blocking, NIR Transmitting

Damage Resistant and “Tough” Environment Solutions:

Many applications for sensors and scanners are industrial or for field use where uptime and reduced product maintenance are not just desirable, but a necessity. Abrisa Technologies offers coated sensor and scanner window solutions for these “tough” use environments as well, whether they be outdoors in sunlight, on the seas or on the road, installed in a hot and humid factory, have high traffic interface contact or constant exposure to dirt and other contaminants.
Sensor and Scanner Window Solutions

Imaging ● 3D Metrology and Mapping ● Obstacle Avoidance

- **Visible AR coating for full color LCD & OLED Displays**
  - Ravg < 0.5% (AOI = 0-30º) 425-675nm
  - Also available with oleo/hydrophobic properties

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Sensor & Scanner Window Solutions

Security and Surveillance ● Machine Vision ● Displays

**Options**

**Coatings:**
- Custom V-Coat, Multi-band, Broadband AR
- AR Coatings to MIL-C-14806 A
- ITO/IMITO for EMI Shielding, Heater, LC Devices
- Custom SWP, LWP, Bandpass, UV & NIR Blocker
- Broad/Narrowband Scanning Mirror Coatings
- Deposition onto Filters, Silicon & Other Materials
- Autoclavable, Bio or Chemically Compatible

**Substrates:**
- Fabrication to Shape & Size
  - Cut & Seam or Circle Ground to Size & Shape
  - Precision CNC - Holes, Bevels, Steps, Notches
- Damage Resistant Substrates
  - HIE™ Aluminosilicates
  - AGC Dragontrail™
  - Corning® Gorilla®
  - SCHOTT AS 87
  - Chemically Strengthened Soda Lime Float
- Low Expansion Chemically Resistant Substrates
  - SCHOTT Borofloat® 33
- Ultra Thin and Wafer Substrates
  - AGC EN-A1
  - Corning® 0211 & Eagle XG®
  - SCHOTT AF32, D263® & AS 87

**Easy-to-Clean & Anti-Fog Solutions:**
- Oleo/Hydrophobic Options
- ITO Heater, HTAF Anti-Fog Solutions

**Graphics & Bus Bars:**
- Color Matched Epoxy Ink
- Non-Conductive Ink
- High Temperature Frit Ink
- Deadfront Ink - Partially Transmissive
- Infrared IR Transmitting Ink
- Silver Epoxy, Silver Frit, CrNiAu Bus Bars