Abrisa Technologies’ PRO-NG™ 120, High-Ion Exchange (HIE™) non-glare aluminosilicate provides 120 gloss level glare reduction in an extra-thin, lightweight format with up to 6x the strength of standard soda lime float. This new HIE™ strengthened non-glare material is ideal for installed or portable displays with large viewing angles and/or in need of bright/sunlight readability where thinner profile, lightweight, and enhanced durability is key. PRO-NG™ 120 is ideal for ruggedized or high-contact displays used in cockpit, cabin, portable field instruments, signature pads, and industrial equipment control panels where both management of glare and high clarity, low haze viewing of the display is key.

Display & Indicator Applications:
- Ruggedized Portable Devices
- In-Cockpit Monitoring & Navigation Systems
- In-Vehicle Wide-Angle Displays
- Outdoor Sunlight Readable Displays
- High-Contact Touch Control Pads
- Lightweight, Slim Profile Hand-Helds

Features:
- Extra-Thin & Lightweight
- HIE™ Ultra-Strong & Scratch Resistant
- Wide-Angle Non-Glare
- Excellent Resolution
- Reduced Fingerprint Visibility

General Properties: (Typical)

<table>
<thead>
<tr>
<th>Property</th>
<th>PRO-NG™ 120</th>
<th>Single Side Non-Glare</th>
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</thead>
<tbody>
<tr>
<td>Gloss Value</td>
<td>120 ±20</td>
<td></td>
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<tr>
<td>Transmission</td>
<td>&gt;89%</td>
<td></td>
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<tr>
<td>Reflection (photopic)</td>
<td>~8%</td>
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<tr>
<td>Density (g/cm³)</td>
<td>2.48</td>
<td></td>
</tr>
<tr>
<td>Resolution (line/mm pair)</td>
<td>14.25</td>
<td></td>
</tr>
</tbody>
</table>

 Formats & Options:
- Sheet Sizes up to 400 x 500 mm
- Thickness 1.1 mm
- Other sizes, thicknesses, coatings & oleophobics may be available upon request - Consult Factory
PRO-NG™ 120 is an extra-thin HIE™ aluminosilicate that supports low profile and reduced weight portable field, in-cockpit, outdoor, and industrial devices with a toughness that is 6X stronger than soda lime float glass. It is environmentally friendly and is produced without the use of lead, arsenic, and antimony.

**HIE™ Damage & Scratch Resistance:**
- 6X stronger than Soda Lime (SL) Float Glass
- > 600MPa Strength
- Depth of Layer* (DOL) 35-45 microns

*Depth of Layer (DOL) is a measurement of the compressive strength of the glass specific to chemically strengthened glass. It is the depth into the surface of the glass to which compressive stress is introduced. It is defined as the distance from the physical surface to the zero stress point internal to the glass.

**Clarity, Haze & Resolution:**
- 120 Gloss ± 20%
- Haze* < 2%
- Clarity > 90%
- Resolution** 14.25 line/mm pair

*Haze: $\frac{\text{Diffuse Transmission}}{\text{Total Transmission}} \times 100$

**Non-Glare Surface Structure:**
- Permanently Acid-Etched < 0.08 microns
- Wide-Angle Glare Reduction
- Fingerprint Resistant
- Nice Tactile Feel for Touch & Sign

**Haze & Clarity vs. Gloss**

**Typical Applications:**
- Touch & E-Signature Pads
- In-Cockpit & Cabin Displays
- High Traffic Control Pads

**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 Round 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® Eagle XG®
    - SCHOTT AF32, D263® & AS 87
  - Other
    - Applied Films & Tints
    - Gasket Application
    - Edge Treatment/Blackening
    - Laser Marking (QR & Barcodes, S/N)

**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
- Dead Front Ink - Partially Transmissive
- Infrared IR Transmitting Ink
- Silver Epoxy, Silver Frit, CrNiAu Bus Bars