What is Photochromic?
Gentex Photochromic coating absorbs direct, or light filtered through a vehicle's windshield to activate the photochromic molecules causing the lens to darken or lighten when exposed or removed from light.

Why use it?
Gentex Photochromic technology enables users to manage variable lighting conditions with one visor, ending the need to switch between clear and tint visor during a mission.

What are the benefits?
This solution reduces the burden and weight of carrying two visors and increases ease of product use, allowing for seamless mission configuration.

**KEY FEATURES**

- Reacts in direct sunlight and in vehicles (through canopies and windshields)
- Begins darkening instantly
- Adapts seamlessly for day-to-night operations
- Clear state transmissions of greater than 80% PLT (Photopic Luminous Transmittance), offers future opportunity for combination with some laser eye protection (LEP) filters
- Maintains a neutral gray color when in darkened state
- External visor surface protected by Gentex's proprietary scratch resistant hard coating
- Replaces the need for two visor (clear and tint) kits
### Photochromic Performance Characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Direct Sunlight</th>
<th>Through Canopies / Windshields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear State</td>
<td>84 T%</td>
<td>84 T%</td>
</tr>
<tr>
<td>Dark State</td>
<td>18 T%</td>
<td>30 T%</td>
</tr>
<tr>
<td>Dynamic Range</td>
<td>67 T%</td>
<td>55 T%</td>
</tr>
<tr>
<td>(T%_{\text{half}})</td>
<td>57 T%</td>
<td>57 T%</td>
</tr>
<tr>
<td>Darkening to (T%_{\text{half}})</td>
<td>9 sec</td>
<td>13 sec</td>
</tr>
<tr>
<td>Fading to (T%_{\text{half}})</td>
<td>85 sec</td>
<td>46 sec</td>
</tr>
<tr>
<td>Darkening to 50 T%</td>
<td>9 sec</td>
<td>20 sec</td>
</tr>
<tr>
<td>Fading to 50 T%</td>
<td>85 sec</td>
<td>46 sec</td>
</tr>
</tbody>
</table>

\(T\%_{\text{half}}\) = midpoint of dynamic range

Direct sunlight illumination conditions: AM2

Through canopies / windshields illumination conditions: AM1 with aircraft canopy having 50% transmittance at 450nm

Temperature: Measurements were made with lens at 23°C ±/− 2° (73F)

### Photochromic Response

**Darkening**

- Through Canopies / Windshields
- Direct Sunlight

**Fading**

- Through Canopies / Windshields
- Direct Sunlight

### Availability

Gentex Photochromic Visors will be replacing the need to operate two visor systems kits in most Fixed and Rotary Wing configurations as well as the Ground Ops-Core® Universal STEP-IN® Visor. The convenience of replacing Two-Visor Kits with Single visors will also be offered in select future Gentex Optics products.

Gentex HGU-55/P Fixed Wing Helmet  
Gentex HGU-56/P Rotary Wing Helmet  
Gentex HGU-68/P Fixed Wing Helmet  
Gentex ALPHA® Eagle SAR Rotary Wing Helmet  
Ops-Core STEP-IN Visor

### Contact Us

Gentex Corporation is dedicated to enhancing personal protection and situational awareness for global defense forces, emergency responders, and industrial personnel operating in high performance environments. To learn more about the Gentex Photochromic Light Activated Lens Technology, contact Customer Service at sales@gentexcorp.com. Like us at facebook.com/Gentexcorp