3M™ Holographic Authentication Products offer an overt, attractive, and easy-to-authenticate brand protection solution. They are well recognized by consumers as security features that also enhance the appearance of the brand.

A hologram’s key feature is that it is interactive, allowing the user to see different images by changing the viewing angle. Covert features can be added to increase security, including microtext, nanotext, laser viewable images, and optical watermarks revealed by secure decoding keys. These features are authenticated only by those with the proper training and tools.

Typical applications of 3M Holographic Authentication Products include securing electronics, pharmaceuticals, and government documents. They are available as opaque metalized or transparent materials. Typical formats include hot stamping foil, pressure sensitive labels, overlaminants, or security strips on various label stocks.

3M Holographic Authentication Products can help companies increase their sales and profits by reducing counterfeiting, diversion, and warranty fraud. Most importantly, they can help protect a company’s most valuable assets – their customers, reputation, and brands.

### 3M Products

#### Metalized or Transparent Holographic Technologies

- Overt holographic images are attractive and appealing
- Images move when viewing angle is changed, encouraging user interaction
- High resolution security holography increases barrier to simulation or counterfeiting
- Transparent hologram allows for subsurface printed graphics
- Optional covert features can be included to provide more security:  
  - Holographic microtext  
  - Laser-viewable hologram  
  - Ultraviolet visible print
- Meets EU RoHS Directive

<table>
<thead>
<tr>
<th>Attribute Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt</td>
</tr>
<tr>
<td>Covert</td>
</tr>
<tr>
<td>Tamper Indicating</td>
</tr>
</tbody>
</table>

Attributes determined by 3M Security Solutions. Ratings can be increased by combining optional features or additional 3M security technologies.
Key Reveal Holographic Technologies

- Covert images are integrated into overt holography and visible through an inexpensive verifier key
- Brand owners control access to secure verifier keys, selecting which supply chain partners can authenticate covert features
- Overt holographic images are attractive and appealing
- Images move when viewing angle is changed, increasing user interaction
- High resolution security holography increases barriers to simulation or counterfeiting
- Optional covert features can be included to provide more security:
  - Holographic microtext
  - Laser-viewable hologram
  - Ultraviolet visible print
- Patented and proprietary technology
- Meets EU RoHS Directive

Attribute Ratings

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Overt</th>
<th>Covert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamper Indicating</td>
<td>★★★☆☆</td>
<td>★★★☆☆</td>
</tr>
</tbody>
</table>

Attributes determined by 3M Security Solutions. Ratings can be increased by combining optional features or additional 3M security technologies.

3M Security Solutions

The security of doing business with a company you can trust.

3M is a leading global provider of innovative security solutions that use proprietary 3M technologies, including light management, optics, films, adhesives and holography. 3M has solved a wide range of security problems for both government and private organizations, protecting everything from passports and drivers’ licenses to electronic components and pharmaceuticals.

Every day, 3M finds new ways to make amazing things happen. Wherever they are, whatever they do, the company’s customers know they can rely on 3M to help make their lives better. 3M’s brands include Scotch, Post-it, Scotchgard, Thinsulate, Scotch-Brite, Filtrete, Command and Vikuiti. Serving customers in more than 200 countries around the world, the company’s 67,000 people use their expertise, technologies and global strength to lead in major markets including consumer and office; display and graphics; electronics and telecommunications; safety, security and protection services; health care; industrial and transportation.

3M Security Solutions

3M is a trademark of 3M
© 3M 2005
Printed in U.S.A.
75-0500-8581-2