



Security Systems Division

3M™ Holographic Authentication Products

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. Pattern destruct feature can also be incorporated into the hologram.

Typical applications of 3M Holographic Authentication Products include securing electronics, pharmaceuticals, and government documents. They are available as opaque metalized or transparent materials with registered or wallpaper graphics. 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 – customer, reputation, and brand.

3M Products

Metalized or Transparent Holographic Technologies

- Overt holographic images are attractive and appealing
- Images move when viewing angle changes, encouraging user interaction
- High resolution security holography increases barriers to simulation or counterfeiting
- Transparent film allows for subsurface printed graphics
- Optional covert features can be included to provide more security
 - Holographic microtext
 - Laser-viewable image
 - Ultra violet visible print
- Meets EU RoHS Directive*
- Pattern destruct feature adds level of tamper-indication
- Holographic images can be registered or wallpaper pattern



metalized



pattern destruct



transparent

Attribute Ratings

Overt	★★★★☆
Covert	★★★☆☆
Tamper Indicating	★★★★★

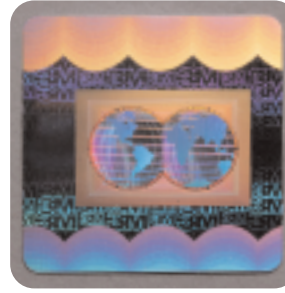
*"Meets EU RoHS Directive" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless stated by 3M in writing, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M.

Attributes determined by 3M Security Systems Division. 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 changes, 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 image
 - Ultra violet visible print
- Patented and proprietary technology
- Meets EU RoHS Directive*
- Holographic images can be registered or wallpaper pattern
- Pattern destruct feature adds level of tamper-indication

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overt



covert



pattern destruct

Attribute Ratings

Overt	★★★★☆
Covert	★★★★☆
Tamper Indicating	★★★★★

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