

HP Indigo Security & Brand Protection Solutions

Advanced anti counterfeiting and diversion solutions

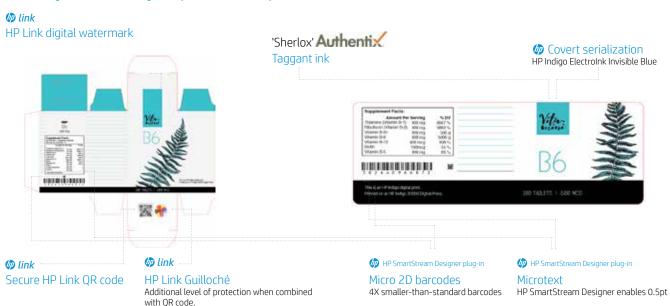
Wide Range of solutions. HP Indigo, in collaboration with various leading security service providers, offers a vast portfolio of unique security and brand protection features utilizing Indigo's outstanding print quality and versatility.

Stronger protection. Combine the various security features available with the power of variable data and serialization to provide your customers with an array of end-to-end solutions that fit their needs.

Productive process. The ability to add layered security features on press in one pass allows you to save time and resources when printing.



Multi layered security on press in one pass



^{*} Sample at the end of this book

Security and brand protection portfolio

Mix and match solutions to meet your customer's specific needs

Plug & play features



Microtext font

Micro 2D barcodes

Guilloché



Security inks

HP Indigo ElectroInk Invisible Yellow/Blue



RainbowSecure™ machine readable infra-red ink



GoSure Machine-readable taggant ink





Sherlox

A suite of machine-readable taggant ink and comprehensive brand protection services



Protected track & trace solutions











Easy to print, hard to copy.

Prevent the creation of copies and enable authentication with easy to integrate solutions

- Utilize the HP SmartStream Designer plugin
- Additional features available from Haiyaa

HP Indigo microtext font

HP microtext font is a unique font designed for HP Indigo presses that allows the printing of text and numbers which appear, to the naked eye, as a thin line or decoration. Microtext can blend into the graphics in strategic places such as hyphens, lines and even text, and is only legible when using a magnifying glass.

Use HP SmartStream Designer to add variable data microtext to create secondary serialization.

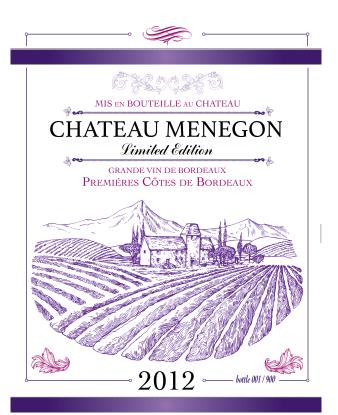
HP Indigo microtext font 0.5 pt

HPINDIGOMICROTEXT 10 pt



Micro 2D barcodes

Leverage HP Indigo's high resolution and print quality to print 2D barcodes which are up to four times smaller than standard barcodes. These variable barcodes are almost unnoticeable in the design and can encode data for verification and traceability.



Guilloché

Guilloché is a high resolution complex pattern made of thin, colorful, curved lines (1 pixel wide) that interlace to create a unique design. Since lines are very thin and adjacent, it makes reproduction of the pattern extremely difficult. Moreover, the pattern can be determined by a complex mathematical model, so recreating the artwork is virtually impossible.

Use HP SmartStream Mosaic technology to generate an unlimited number of different Guilloché patterns, from one complex Guilloché functioning as a seed pattern.



HAIYAA



HAIYAA offers a rich set of security solutions based on their proprietary VDP engine, VariPrint, and various software modules, such as their security module which simplifies the creation of sophisticated anti-couterfeit applications.

HAIYAA's Security modules include features such as random color barcode, lenticular image, UV fluorescent pattern, digital fiber pattern, mini 2D codes, Haiyaa Oreo Label and many more.

• Random color barcode features color squares randomly generated making the color of every barcode different, thus impossible to reproduce.

- The lenticular image feature includes a hidden watermark inside a pattern image. By rotating a lenticular film (key) with the same or different lpi in different angles, various hidden texts become visible. This feature can support up to 4 layers, each linking to different variable data.
- The UV fluorescent pattern feature enables printing of a pattern image simulating UV effects by using normal CMYK ink.

www.haiyaatech.com





Deliver powerful authentication with a range of security inks

Combine the power of HP Indigo's digital capabilities, including variable data, with HP Indigo ElectoInk Invisible Yellow and Blue or RainbowSecure™ infra-red ink to provide a unique offer of covert serialization (numeric and codes).

HP Indigo ElectroInk Invisible Yellow & Blue

These two transparent Electrolnks are visible only under a UV light glowing yellow and blue respectively, using a black light lamp or LED.

Delivering high permanence, these inks are suitable for brand protection applications, allowing you to offer invisible text, codes or shapes.

Covert serialization with HP Indigo ElectorInk Invisible Blue



RainbowSecureTM Machine readable infra-red ink



RainbowSecure

VerifyMe's RainbowSecure, powered by HP Indigo, is a patented and proprietary, covert anti-counterfeiting solution.

It is based on IR converting pigments made of rare earth pigments which appear invisible to the human eye, but can be activated using authentication devices specifically tuned to the unique frequency of each batch of ink.

RainbowSecure is an ideal solution for any company or government body looking to covertly protect goods and documents. It adds an invisible mark that is too difficult for counterfeiters to emulate or reproduce, providing an uncompromised layer of protection.

Printers and manufacturers can use customized devices to view the non-visible pigment characteristics used to produce covert item level serialization to support their supply and distribution chain security.

VerifyMe

VerifyMe is a high-tech solutions company in the field of product and human authentication. Its technology authenticates products, documents and currency with a suite of proprietary security inks and pigments.

www.verifyme.com

Inactive ingredients:

Black iron oxide, brown iron oxide, carnauba wax, corn strach, D&C yellow #10 aluminum lake, FD&C yellow #6 aluminum lake, hypromellose, methacrylic acid copolymer type C, polysorbate 80, powered cellulose, propylene plycol, shellac, sodium lauryl sulfate. triacetin, triethyl citrate.



Hexic Medicine LTD P.O Box 66852, 70 Bowman St. South Windsor, CT 06074

This is an HP Indigo digital print. Printed with VerifyMe™'s RainbowSecure™ powered by HP Indigo.

Sherlox end-to-end authentication system Machine-readable taggant ink



HP Indigo and Authentix have partnered to bring Sherlox, Authentix's brand protection offering to HP Indigo customers, marking the first time Authentix covert markers are available on digital presses.

Implementing the Sherlox solution on HP Indigo digital presses delivers an effective and agile anti-counterfeiting solution with the flexibility of precision marking enabled by digital printing.

Sherlox is a premier solution targeted to pharmaceuticals, safety products, spirits, agchem, and other high-value items.

The covert ink can be printed on a variety of substrates for primary and secondary packaging.

Beyond the printing of covert security features, Sherlox enables in-field authentication with compatible reader technology of markings, mobile connectivity to a powerful information system in the cloud, and comprehensive services to identify and take action against counterfeit activity with real data.

www.authentix.com/sherlox





GoSure machine-readable taggant ink





The GoSure solution

This unique, highly secure, covert tagged ink can be authenticated by the GoSure handheld reader, which provides audio and visual confirmation when authenticating the presence of the unique marker.

Printing with GoSure ink on an HP Indigo digital press enables selective and powerful marking, delivered in one single print pass. This allows brand owners and authorities to easily authenticate products throughout the supply chain, reducing counterfeiting and product diversion.

About Bsecure

Bsecure is a full-service brand and document protection organization providing consulting, development and integration of the latest frontline technologies designed especially to combat and protect from gray marketers and counterfeiters. With over 25 years of experience, Bsecure is a spinoff of its parent company, Pitkit Printing Enterprises Ltd. Bsecure is partly owned by ArjoSolutions, one of the largest security paper producers in the world.

www.bsecuregroup.com



Protected track & trace solutions



Reduce diversion, counterfeit and theft of goods with track & track solutions

Include track & trace marks, such as digital watermarks and protected bar codes, that are difficult to duplicate, destroy or block, and track items throughout the supply chain, from production to end consumer.



Tap into the power of end-to-end identity using HP Link Technology

HP Link solutions deliver brand protection and supply chain efficiency through serialization, creating new possibilities for packaging, labeling, publishing, and photo products.

Give every product a unique identity through overt or covert marks – including secure QR codes, Guilloché and imperceptible watermarks – enabling you to protect, track, and manage each item through its entire lifecycle.

Set geographic parameters, scan limits, and establish other business rules on the Link Technology online portal to identify deceitful activity

Associate critical product information to help enforce distribution compliance.

Integrate with your print production workflow using the HP SmartStream Composer or Designer plug ins, or with your current variable data printing (VDP) software solution.

HP Link also offers open APIs and a mobile SDK to create marks, read marks, update information, and integrate with your servers and/or current solutions. www.linkcreationstudio.com



Contact us to learn more:

* Sample with HP Link secure QR code and Guilloché at the end of this book

Download the app and interact with the demo







Instructions:

- 1. Hold phone parallel to the paper
- 2. Hold roughly 4-7 inches away
- 3. Scan with the Link Reader app



ATT – Titanium Security



Titanium is a 3-in-1 security solution for packaging and labeling.

The solution includes high-security elements that can be mixed and matched per need:

Authenticate products with patented copy-sensitive Seal Vector® code, a unique high-resolution mark that deteriorates when copied by counterfeiters, making it possible for brand agents to detect fake products with a smartphone and optical adaptor.

Identify each product using a unique serial number and QR code to allow unit traceability and detect and deter parallel markets.

Build customer loyalty and confidence by giving each product a distinctive signature and inviting consumers to scan the QR code and check this signature on a dedicated mobile website. This mobile website can be leveraged to extend consumer engagement and connect the packaging with mobile marketing campaigns.

Titanium has been successfully used on billions of products worldwide over the last decade.

The Titanium solution meets international standards and is compatible with all 2D-code based traceability software.

www.att-fr.com



FiberTag™

A cost-effective solution to produce security labels with HP Indigo



FiberTag is a security solution for producing security labels with a unique and visible fingerprint that is impossible to duplicate even by its original manufacturer. It is used for brand protection and document security.

The FiberTag labels are printed on the Fibertracker material with any HP Indigo digital press, using its serialization capability. After printing, each FiberTag is scanned and recorded offline and uploaded to Prooftag's online platform.

FiberTag seals are serialized with a 2D code to enable item-level track and trace, offering online visual authentication through any internet connected device. Each FiberTag label is linked to a dynamic presentation page to provide information on the secured item.

The FiberTag label is also designed to function as a seal tampering prevention mechanism.

www.prooftag.net/fibertag

Authenticity Marketing How to verify? · Prove the authenticity of each Add value to your product On the Internet product to your distributors Engage your consumers and 1.Connect to the website and consumers create a direct relationship indicated on the seal and Dissuade counterfeiters Enhance your consumer's enter the reference experience of your product Track & Trace 2. Compare the chaosmetric Manage your distribution pattern with the one networks to identify market appearing on the screen diversion 3. Match the product with its · Trace each product from description to validate its production to consumption authenticity for total quality management With a Smartphone Integrity · Scan the QR Code with · Prevent packaging refilling your favorite QR Code · Alert consumers on reading application packaging alteration

Micro Focus Global Product Authentication Service (GPAS)

GPAS is a secure and scalable way to crack down on counterfeit products such as medications, nutraceuticals, cosmetics, auto parts, toys, and electronic components — in fact any manufactured item.

GPAS allows customers to use their smartphone to scan a product's QR code or send the code via a text message. Immediate results will verify whether the product is real, counterfeit or on recall!

This helps protect customers from harm and businesses from potential loss of revenues and brand erosion, while, just as importantly, providing a direct channel to communicate with the customer.

GPAS also provides product traceability at the finished goods and ingredient levels within both open and closed supply chains. Support for Blockchain provides future-proof security to prevent fraud.

GPAS services provide business intelligence and analytics reporting alerts to unlock hidden patterns that provide a real-time product and brand monitoring solution.

The GPAS plug in for HP SmartStream Designer integrates seamlessly into workflows, allowing the creation of sophisticated custom security jobs through a simple, affordable variable data tool optimized for HP Indigo presses.

The GPAS plug in for HP SmartStream Designer integrates seamlessly into workflows, allowing the creation of sophisticated custom security jobs through a simple, affordable variable data tool optimized for HP Indigo presses.

www.microfocus.com



QR barcode + Guilloché





* Sample at the end of this book



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