The Essential Video Spectral Comparator

VSC® 8000

for document examination

The Essential Video Spectral Comparator

Examine and Authenticate
Passports and ID Cards
Security Documents
Banknotes and Cheques
The VSC®8000 combines sophisticated digital imaging and multi-wavelength LED technology with a clear and efficient software interface, to provide a complete solution to the examination of all forms of questioned documents.

**Trusted Technology**
The VSC®8000’s advanced design is foster-freeman technology at its best, trusted by immigration authorities, government agencies and forensic examiners worldwide.

**Reveal Detail**
Using a combination of examination tools observe covert security features, confirm document authenticity, or reveal evidence of forgery.

**Excellent Image Quality**
Using **SRI** Super Resolution Imaging, the VSC®8000 provides sharp, bright images of documents at the highest magnification.
**VSC® 8000 SYSTEM FEATURES**

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**SRI Technology**

Unique to the VSC®8000, Super Resolution Imaging (SRI) is an optical system providing excellent clarity and image resolution of documents up to A4/Letter size.

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**Microspectrophotometer**

Non-destructive spectral analysis of documents can identify differences in ink and paper formulations.

Absorption, Reflectance, Fluorescence & Transmitted spectra can be captured in real time and displayed on-screen in a simple graphical format.

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**NEW 3-Dimensional Imaging**

Derive a 3D model of a documents surface topography in order to better analyse security features, pen-tip strokes and other impressions in paper.

Colormap, invert, and rotate images throughout 3-dimensional space to aid analysis.

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**Integrated XY Stage**

A motorised XY translation stage allows fast and precise positioning of documents at high magnification.

Smooth sub-millimetre movements are controlled via simple on-screen controls.
## VSC® 8000 SOFTWARE

### Intelligent Software

VSC® Suite is a software package that maximises the effectiveness of the VSC®8000 by providing the user with complete control of VSC® functions via a fluent quick-access toolbar.

### Document Databases

Create in-house databases for checking questioned documents against the authentic or subscribe to regularly updated Banknote and Security Document databases.

### Automated Examinations

Automated examination procedures greatly increase both the speed and efficiency of examinations.

- Multiple images are displayed as thumbnails stored with VSC examination settings.

### Calibration & diagnostics

- To ensure accurate and repeatable results, the system can be calibrated using NIST traceable standards.
- Simple automated diagnostics check the status of motors, light sources and filters. Requires optional VSC Calibration Tool.

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VSC® 8000 APPLICATIONS

Multi-spectral illumination

Directional, multi-spectral light sources from UV, through the visible spectrum, to IR can reveal details that are invisible under white light, including semi-covert security features designed to respond at set wavebands.

- UV activated features
- OVDs & holograms
- Anti-Stokes features
- Retro-reflective features
- Optically variable inks
- Phosphorescent inks
- Watermarks
- Multiple laser images
- Latent images
- Birefringent features
- See-through register
- Stamps and embossing

Alterations & Counterfeits

Reveal evidence of document abuse including page or photo substitution and chemical erasures.

Analyse inks and papers using infrared examination, hyperspectral imaging and the system’s integral microspectrometer.

Advanced Security Features

VSC software can auto-detect e-passport data and decode barcodes, Machine Readable Zones (MRZ), and concealed information.

Software is regularly updated to include examination procedures for new security techniques when adopted.

NEW Facial Recognition

Identify an individual by comparing their physical appearance with the photo(s) present in a passport or ID document.

An optional accessory, the VSC Facial Recognition Kit is powered by the gemalto Live Face Identification System.
Document and banknote databases
Two reference databases showing the security features found on travel documents, including passports and ID cards, and banknotes.

Banknotes database
Information and images of banknotes from 184 countries

Security Documents database
Information and images of passports, ID cards and Driving Licences from 197 countries

Microscope Options
A range of high magnification imaging systems providing input into the VSC® 8000 via a high resolution video camera. For full details see ‘VSC Microscopes’ datasheet

Nikon Microscopes
Contact Foster+Freeman to request further details

Leica Microscopes
Contact Foster+Freeman to request further details

DVM Microscope
Digital Video Microscope with UV & white light LEDs provides up to x2290 magnification

PVM Microscope
Portable Video Microscope with 3x optical zoom provides up to x249 magnification

E-Passport and ID Card Readers
A choice of stand-alone e-Passport readers that can operate independently of the VSC®.

Reader Option 1A
- OCR, MRZ, RFID & CARD reader
- Stand-alone or VSC® integrated

Reader Option 2A
- High-performance flatbed reader
- 500 DPI high resolution imaging
- Multiple wavelength illumination
- OCR, MRZ, RFID

Reader Option 3
- RFID and CARD reader with CCID interface
- USB connection to PC

Examination Accessories
VSC Facial Recognition Kit
A choice of Standard or Experts hardware for the capture and comparison of facial images. See dedicated brochure for further details

gemalto® Live Face Identification System
Powerful facial comparison software. Compare passport photo with e-chip and live images.
- High match accuracy
- NIST report available

Invisible Information Decoders
Software to display embedded IPI and ICI on passports and ID cards. Uses Scrambled Indicia Technology supplied under licence from Graphic Security System Corp.

Letterscreen++ Decoder
Software to display unique microtext wave detection and verification by special algorithm based on personal data in MRZ. Supplied under licence from Jura, Hungary

Document Support Weights
Set of three non-marking document weights

UV Polarised Light Viewer
UV polarised light viewer for VSC®8000 (specifically to view Swiss passports).

Magnetic Security Feature Imager
Magnetic ink profiler with USB connection.

Quartz Glass Holding Plate
200 X 200mm Quartz glass plate to hold documents flat during examination.