VSC® 8000
THE ESSENTIAL VIDEO SPECTRAL COMPARATOR
for Questioned Document Examination

Examine and Authenticate
Passports & ID Cards
Security Documents
Banknotes & Cheques

foster+freeman
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**

**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.

**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.

**Document Databases**

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

**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.
Intelligent Software

VSC® Suite 7.0 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 Specific Workspaces

A range of application focussed workspaces providing tools and functions specific to the type of document being examined.

Pre-set workspaces include:
- Passports
- ID Cards
- Banknotes
- Handwriting
- Custom

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.

Reliable system performance can be verified using simple automated diagnostics to check the status of motors, light sources and filters.
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.

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.

- 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

Multi-spectral illumination

- UV fluorescent fibres and ink
- Infrared fluorescent ink stamp
- UV phosphorescent feature
- Anti-Stokes security feature
- UVD feature on banknote
- Circular polarised feature
- Oblique illumination of embossing

Alterations & Counterfeits

VSC® 8000 APPLICATIONS

Evidence of tampering

Invisible Personal Information

ICAO coded data

e-Passport biometric data

Taggants

1D and 2D barcodes

LetterScreen embedded data

Security threads

Micro/nano printing

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**VSC® 8000 ACCESSORIES**

**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**
The Foster+Freeman Digital Video Microscope with UV & white light LEDs provides up to x2290 magnification and has been specifically designed for the examination of taggants.

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

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

- **Reader Option 2**
  - 24-bit multi-document imaging
  - 400 DPI high resolution imaging
  - Multiple wavelength illumination
  - OCR data capture software

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

**Examination Accessories**

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

- **Document Support Weights**
  Set of three non-marking document weights

- **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.

- **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.

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