

foster+freeman

# VSC<sup>®</sup> 40 Range

Video Spectral Comparator

A Range of Modular QDE Systems



**EXAMINE**

Questioned Documents

**DETECT**

Alterations & Counterfeits

**REVEAL**

Covert Security Features

# 40 Range

## Modular Document Examination Systems

Since the introduction of the original VSC system in 1979, Foster + Freeman have been recognised as world leaders in the design and manufacture of high specification systems for the forensic examination of questioned documents.

The current range of VSC systems includes the VSC6000/HS, the compact but powerful VSC400 and the modular range of VSC40 instruments.

The range is supplemented by the VSC-QC1, a fast 'touch screen' system for the verification of passports and ID cards.

### A range of multi-spectral examination systems for checking a wide range of security documents

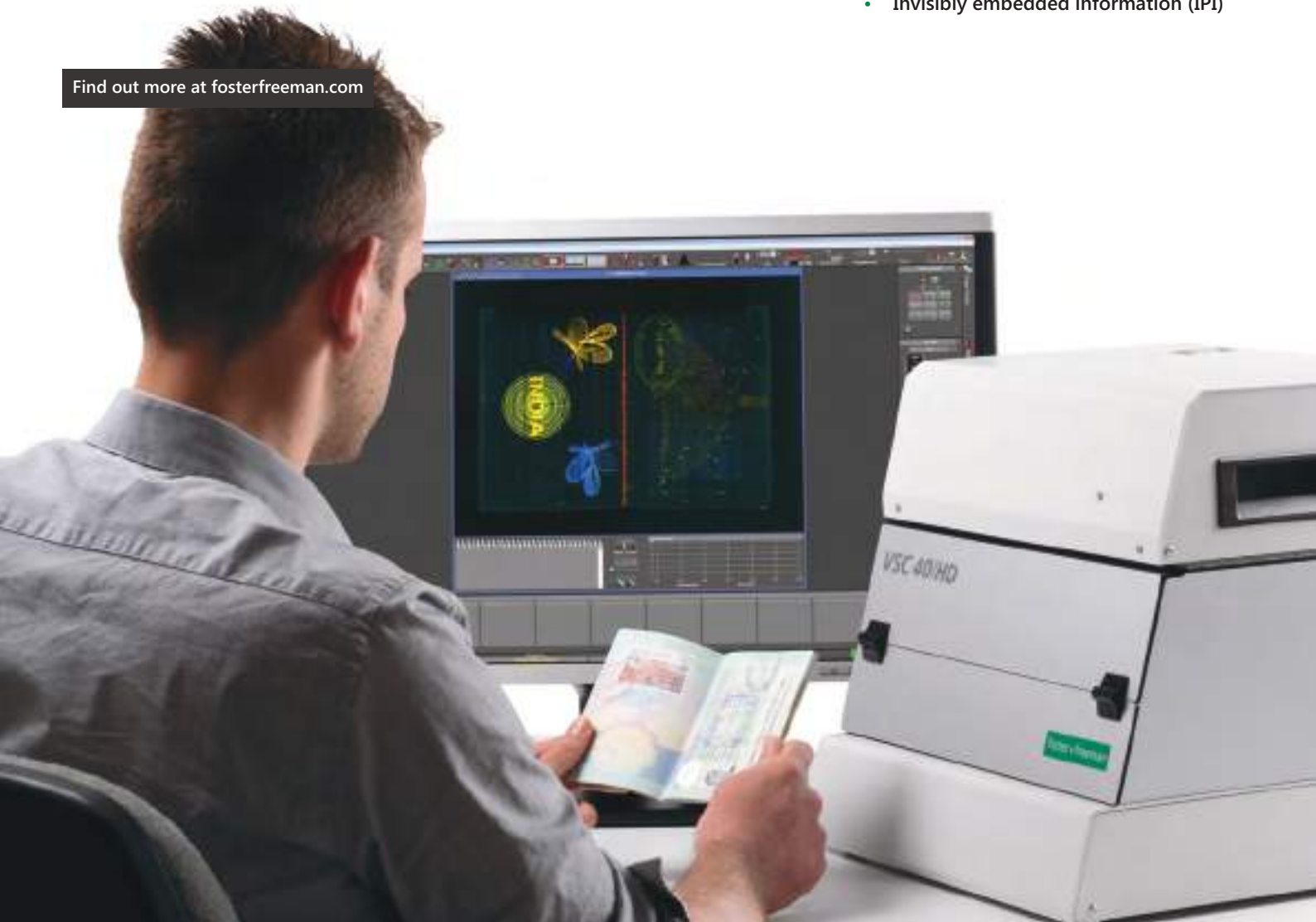
The VSC40 range of document examination systems, has been designed to provide tailored solutions to the examination and verification of a wide range of security features incorporated into passports, driving licences, banknotes, identity cards and credit cards.

Four system variants, built around the same core VSC40 hardware, may fitted with a variety of Optional Modules to offer different levels of functionality.

The VSC40 range allows you to check...

- UV activated security features
- Infrared activated anti-Stokes inks
- Watermarks and metallic strips
- Variations in the infrared absorption, reflectance and fluorescence of inks
- Retro-reflective images
- DOVDs, holograms and Kinegrams
- Surface features such as embossed stamps and indented writing
- Paper quality, using high magnification
- ICAO coded data
- Invisibly embedded information (IPI)

Find out more at [fosterfreeman.com](http://fosterfreeman.com)



## Your Choice of System

### Choose from 4 system variants

The modular design of the VSC40 makes it a uniquely versatile system that can be tailored to fit the individual requirements of each customer. Choose from a selection of light sources, security decoders and readers, document reference databases and accessories to configure an instrument that meets your needs.

## High Visual Clarity

### High resolution imaging system

Images captured via the analogue CMOS camera through the high magnification zoom lens provide the examiner with a crystal clear on screen representation of the document under examination.

## Auto Examine

### Semi-automate tasks using preset examination routines

The VSC40 allows the operator to manually select multiple illumination and filter settings to create an examination routine that will then be processed automatically. Results are displayed as a thumbnail gallery; selecting a gallery image will automatically produce a full screen display and recall the examination settings.

## Image Enhancement

### On-screen image processing facilities

Images captured via the VSC40 camera may be enhanced in order to achieve the best possible image clarity. Enhancement tools include, sharpening, background flattening, gamma correction, noise reduction and contrast stretch.

## Intelligent Assistance

### Ensures compatible illumination and filter selection

When the operator selects a filter to generate fluorescence, the system will automatically select the first compatible imaging filter. The operator may override the automatic selection if required.

Effective on all types of passports and ID cards,  
VSC technology is in use by immigration authorities,  
government agencies and forensic laboratories worldwide



UV fluorescent security feature is revealed using UV 365nm illumination.



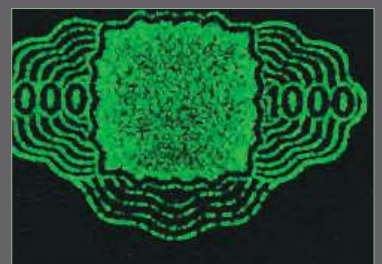
IR fluorescence examination reveals the presence of two different inks



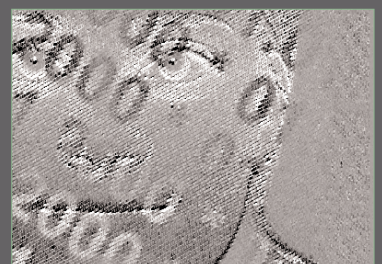
High magnification examination of a passport reveals evidence of tampering.



OVDs and holograms can be viewed and recorded using multi-angle LED arrays.



Anti-Stokes security inks can only be visualised using intense IR illumination



Optional IPI decoder for the examination of embedded personal information.

# SYSTEM SELECTION

All VSC40 systems include the same Common Features. Variants are created through the addition of selected Examination Modules plus your choice of System Control Options and Optional Accessories

## COMMON FEATURES

### VSC40 Base Unit

- System housing and power supply

### Imaging System

- CCD colour/mono IR sensitive camera with zoom lens
- Field of view 9.3mm x 6.9mm to 145mm x 107mm
- x43 (± 5%) magnification on a 22" monitor plus x2 digital

### UV-Vis-IR illumination

- Incident IR and Visible light source
- Transmitted IR and visible light source,
- Twin side light source
- High intensity transmitted spot light
- Incident UV (365nm) light source
- Co-axial light source

## EXAMINATION MODULES

VSC40 Variant	M1	M3	M7	FS
Incident UV-C 254nm Light Source		✓	✓	✓
Incident UV-B 313nm Light Source		✓		✓
Transmitted UV-A 365nm Light Source		✓	✓	✓
Anti-Stokes IR 740-1100nm Light Source		✓		✓
Multi-Angle LEDs x2 or x13 LED arrays for OVD visualisation	x2	x2	x2	x13
Camera Filters x1, x6 or x13 Camera filter	x1	x1	x6	X13
100W Visible Spotlight With single or multi-band filter			Single	Multi

## SYSTEM CONTROL

VSC40 systems are available with a choice of desktop or laptop PC systems.

VSC software is compatible with Windows and Apple OS computer systems.

Desktop PC with 22" monitor  
VSC40/PENT  
Complete control of VSC system hardware functions using mouse and keyboard.

Laptop PC with 17" display  
VSC40/PENT/LT  
Offers the same functionality as a desktop PC with added portability.

## OPTIONAL ACCESSORIES

<b>PolariSafe Viewer</b> VSC/POLARISAFE UV polarised light viewer	<b>Carrying Case</b> VSC40/CC Wheeled, padded, water resistant carry case with retractable handle	<b>Embedded Information Decoder</b> VSC40/IPI Detect and display data that has been embedded within images
<b>Uninterruptible Power Supply</b> VSC40/BAT In case of AC power failure Typical battery runtime 2 hours	<b>Microscopes</b> See additional brochure Select from a range of stereo microscopes to provide an alternative input to the VSC	<b>Security Documents Database</b> Includes over 1,550 Passports, ID cards and Driving Licences from 179 countries. Archive Subscription VSC/DB/ARCHIVE VSC/DB/KDATA
<b>X-Y Translation Stage</b> VSC40/400/TRANS Manually adjustable XY stage for accurate positioning of documents	<b>ICAO E-Reader</b> A choice of USB 2.0 compatible readers E-Reader 1 VSC/EREADER1/A E-Reader 2 VSC/EREADER2 E-Reader 2 VSC/EREADER3	<b>Banknotes Database</b> Includes over 70,000 images of banknotes from 184 countries. Archive Subscription VSC/DB/ARCHIVE/C VSC/DB/KDATA/C