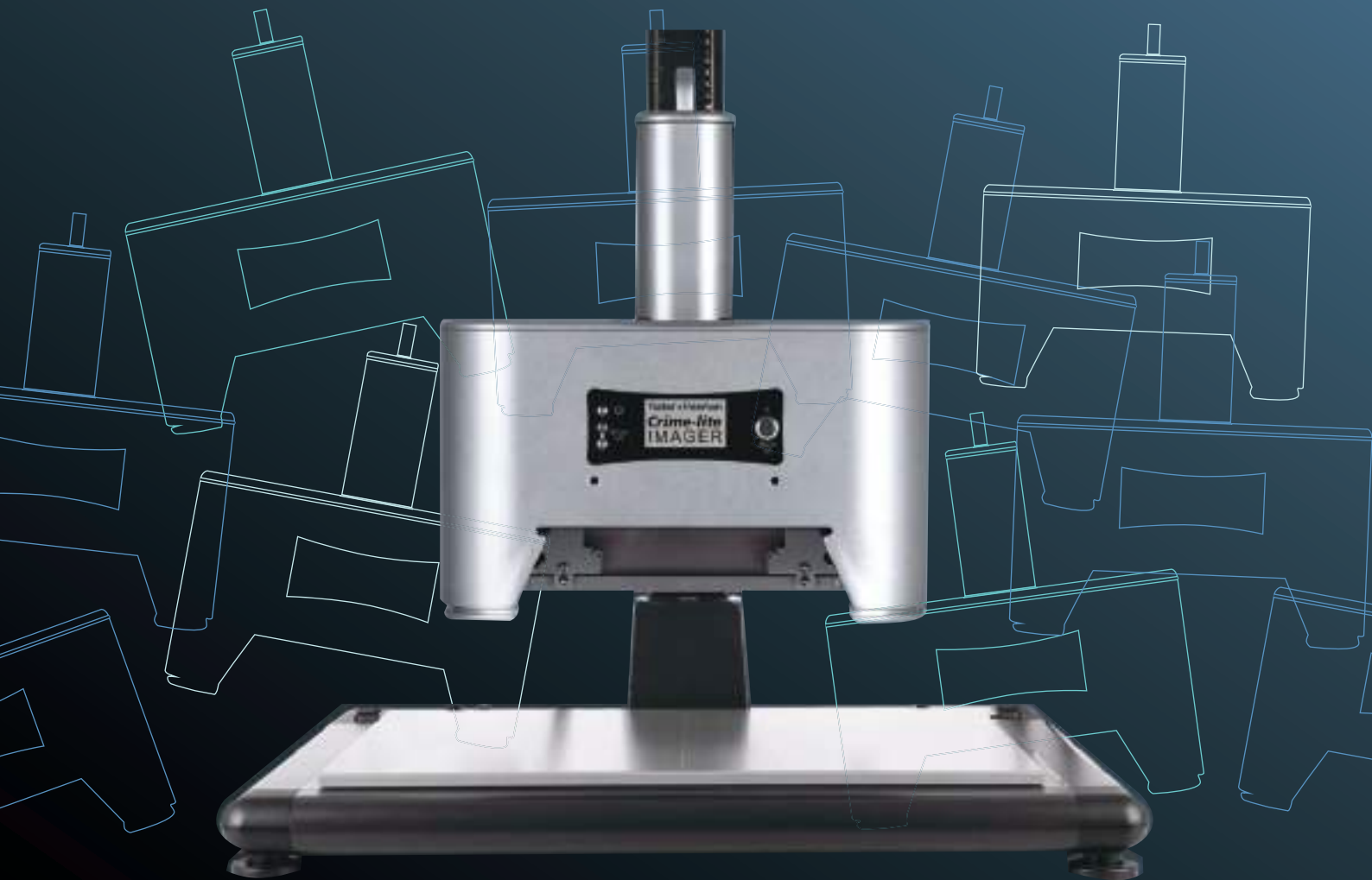# *Crime-lite*®
IMAGER

Semi-Automated Workstation for
FINGERPRINT PHOTOGRAPHY

Illuminate >> Capture >> Enhance

Crime-lite®
IMAGER

UV-Vis-IR imaging
High performance 5MB GigE camera
sensitive from UV to IR

Multi-spectral illumination
32-LEDs providing up to
98 colour combinations

Integral lens filter selection
Motorised filter wheel

Two modes of operation
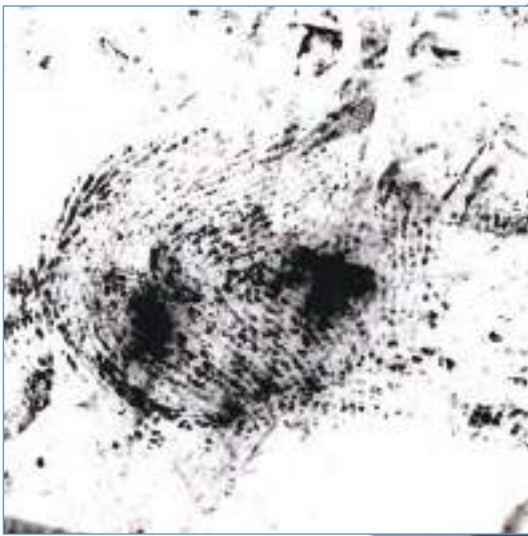Choose from semi-automated or
advanced manual mode

A fully integrated workstation for the semi-automated illumination, photography & digital enhancement of fingerprints

A complete forensic imaging system, the Crime-lite® Imager combines advanced image capture technology with multi-wavelength illumination and digital image processing, to expedite the process of fingerprint capture and enhancement.

Operated via an intuitive software interface, the system simplifies the fingerprint imaging process, asking the operator to identify the type of evidence to be examined (using a series of simple drop-down menus), before semi-automatically selecting the optimum illumination, image capture and post-processing to visualise fingerprints under the selected conditions.

Consistantly high quality results can be produced in a matter of minutes by operators with varying degrees of photographic expertise.

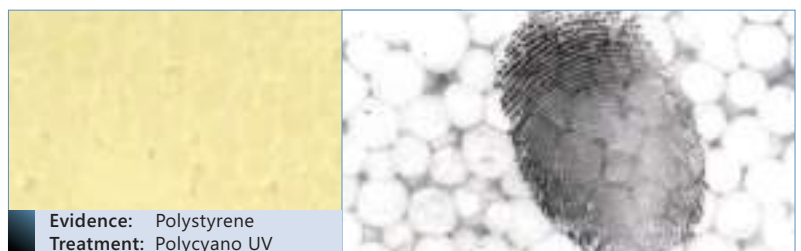**Evidence:** Plastic shopping bag
Treatment: Cyanoacrylate

Delivers consistantly impressive images of fingerprints on a wide range of evidence types

Expert photographic practice is made simple using the semi-automatic mode of operation where enhancement options are presented as a simple dropdown list.

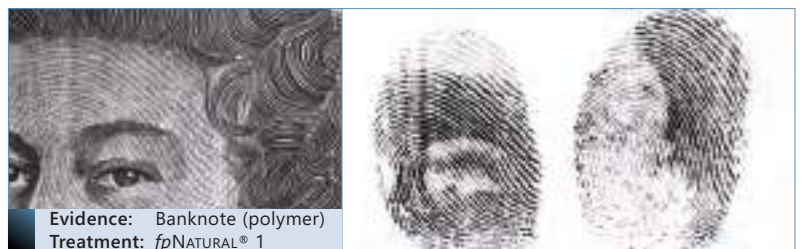**Preset evidence types include:**

- 18 fingerprint treatment types including: DFO, ninhydrin, BY40, PolyCyano, Ardrox etc.

- Handwritten and printed documents

- Trace evidence including blood, fibres, GSR etc.

Evidence: Polystyrene
Treatment: Polycyano UV

Evidence: Packing tape
Treatment: Black Powder

Evidence: Banknote (polymer)
Treatment: fpNATURAL® 1

Fully-integrated illumination and image capture

The standalone Crime-lite®Imager system includes high sensitivity image capture technology and multi-spectral illumination within a single compact unit that can be used in the forensic laboratory or deployed at the crime scene.

Illumination:

- 32x high intensity narrowband LEDs capable of producing 98 colour combinations
- 4x powerful Vis/IR halogen lamp capsules
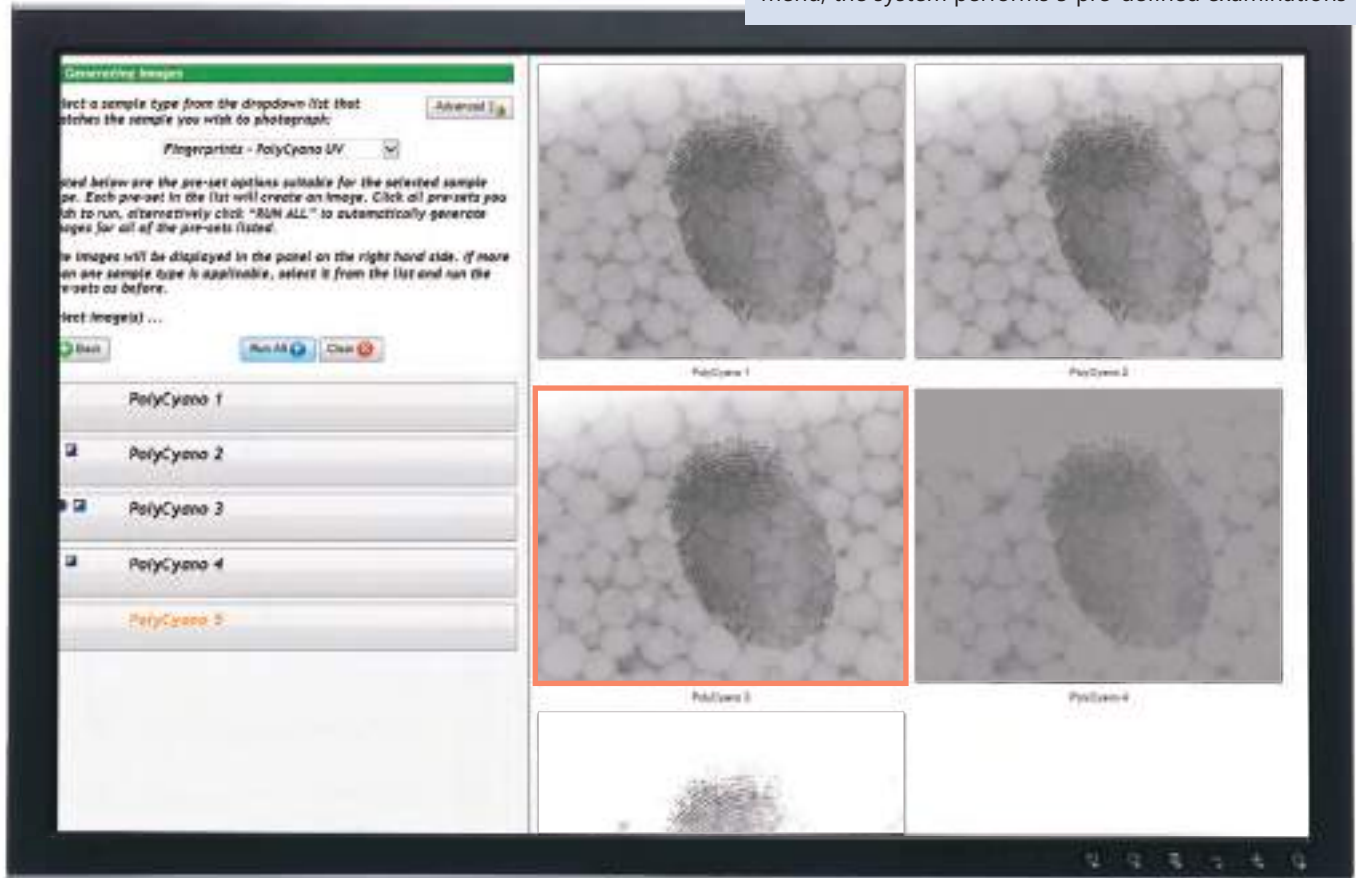- Optional Vis/IR continuous narrowband illumination source, 400-1000nm

Imaging:

- High performance 5 megapixel camera with GIGE connectivity
- 35mm wide angle lens (other lenses available)
- Integral second camera (provides contextual images)

Additional illumination, system mounting options, PC hardware, and a selection of alternative camera lenses allow you to expand upon the standard Crime-lite®Imager in order to build a system to meet your application requirements.

1
Place evidence under the Crime-lite®Imager

2
Select evidence type from drop-down menu

3
Press 'Run' View Results

Easy-to-use software performs complex enhancement routines

Integral to the design of the Crime-lite®Imager is the inclusion of easy-to-use software that provides sophisticated image processing and enhancement tools to uncover hidden detail within images.

Using the semi-automatic mode of operation, effective imaging and enhancement can be achieved by selecting a pre-set evidence type from the drop down menu. An image of the evidence is then captured under pre-defined illumination settings and automatically enhanced before displaying results as selectable thumbnails.
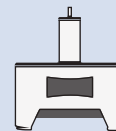
Alternatively, in the systems advanced mode, the operator takes full manual control of the Crime-lite®Imager, selecting lighting and filters as well as applying image enhancement processes from the library of programmes.

.Fingerprints - Cyanoacrylate
.Fingerprints - DFO
.Fingerprints - Fluorescent Powder
.Fingerprints - Gentian Violet
.Fingerprints - Impressions
.Fingerprints - Untreated Prints
.Fingerprints - Lifts
.Fingerprints - Ninhydrin
.Fingerprints - PolyCyano UV
.Fingerprints - Rhodamine 6G
.Fingerprints - Silver Nitrate
.Fingerprints - White Powder
.General - Contrast
.General - Fluorescence
.Other - Accelerants
.Other - Blood Spatter and Stains
.Other - Body Fluids

Select evidence type from a drop-down menu

Crime-lite® Imager System Specification

Order Code: QCL/CI/01

Primary Image Capture	5MP camera	• UV-Vis-IR sensitive • High speed GigE connectivity *For full camera specification please contact sales@fosterfreeman.com*
	35 mm lens	• 35mm focal length • 62mm x 52mm field of viewl

Contextual Imaging	2MP colour video camera	• Autofocus • 240mm horizontal field of view

Camera Lens Filters	Long pass filters	• 400nm, 455nm, 495nm, 530nm, 550nm, 570nm, 590nm, 610nm, 630nm, 645nm, 665nm, 695nm, 715nm, 780nm, 850nm
	Short pass filters	• 730nm, 660nm, 610nm and 550nm • Polarising filter

Illumination	Multi-wavelength ringlight	• 32x high efficiency LEDs providing • 4x White 400-700nm • 4x Blue/Green 445-510 • 4x UV 350-380nm • 4x Green 480-560nm • 4x Violet 395-425nm • 4x Orange 570-610nm • 4x Blue 420-470nm • 4x Red 600-660nm
	UV/IR illumination	• 4x 20W VIS/IR capsule lamps
	Safety	• Classified to European safety standard risk group 2 (IEC/EN 62471:2008)

Additional Camera Lens Options

25mm Lens
Order Code: QCL/CI/02
- 25mm f/1.6 wide-angle lens
- FOV 97mm x 81mm
- Resolution 650 pixels/inch

50mm Lens
Order Code: QCL/CI/03
- 50mm f/1.8 narrow-angle lens
- FOV 42mm x 35mm
- Resolution 1500 pixels/inch

25mm Quartz Lens
Order Code: QCL/CI/22
- For UV imaging 230-400nm
- FOV 97mm x 81mm
- Resolution 650 pixels/inch

PC Hardware Options

Desktop PC
Order Code: QCL/CI/10
- Windows 10
 For current specification please contact sales@fosterfreeman.com

24" Monitor
Order Code: QCL/CI/11
- 24" widescreen display
- Resolution: 1920 x1200

Laptop PC
Order Code: QCL/CI/09
- 17" display
 For current specification please contact sales@fosterfreeman.com

System Mounting Options

Bench Mount Stand
Order Code: QCL/CI/06
- Fits over existing work surfaces
- H44 x W850 x D820mm
- Magnetic work top
- Requires motorised column (QCL/CI/05)

Floor Stand
Order Code: QCL/CI/09
- Structural aluminium frame
- H720 x W850 x D722mm
- Magnetic work top
- Requires motorised column (QCL/CI/05)

Motorised Column
Order Code: QCL/CI/05
- 1.5m adjustable column
- Up to 1030mm vertical travel
- Focus adjustment control
- 24V-DC motor

Portable Stand
Order Code: QCL/CI/04
- Lightweight aluminium stand
- H365 x W376 x D281mm
- Includes adjustable article stand
- Weight 1.5kg

Carry Case
Order Code: QCL/CI/08
- Holds Crime-lite® Imager, portable stand and accessories

foster + freeman reserve the right to alter the specification of the Crime-lite® Imager or any accessories without prior notice.

Examination Accessories

Optional Light Sources

FLS Light Source
Order Code: QCL/CI/12

- 100W Vis/IR halogen lamp
- Continuous narrowband illumination 400-1000nm
- Continuous bandpass filter
- Requires additional light guides

This continuous 400-1000nm narrowband light source, used in conjunction with fibre optic light guides, provides specific wavelengths of light for improved contrast imaging and removal of interfering backgrounds.

Specialist light guides provide backlight, coaxial and oblique lighting for the examination of fingerprints on difficult surfaces such as reflective, curved or dusty surfaces or as 3-D impressions in soft materials.

FLS Light Guides

1 Ring light QCL/CI/13
Diffuse uniform illumination

2 Coax light box QCL/CI/15
Illumination for reflective surfaces

3 Dark field ring light QCL/CI/16
360° oblique illumination

4 Transmitted Light QCL/CI/18
Transmitted and side lighting

5 Dual Gooseneck QCL/CI/19
Directional side lighting

6 Linelight QCL/CI/20
Low angle oblique lighting

Optional Examination Accessories

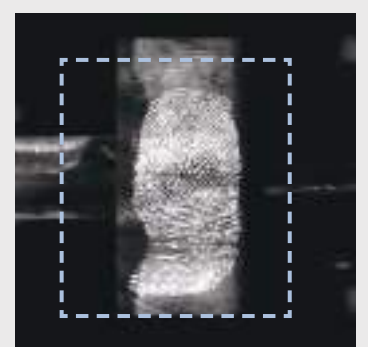**Cylindrical Surface Unwrapper (CSU)**
Order Code: QCL/CI/CSU

- Evidence clamping jaws
- Reversible alignment guide
- H110 x W85 x L330mm
- USB connectivity

'Un-wrap' 2D images of fingerprints on 3D objects including bullets, pens, tools & syringes etc.

An innovative new accessory for the Crime-lite®Imager, the Cylindrical Surface Un-wrapper (CSU) enables the forensic examiner to extract 2D images of fingerprints from a 3D cylindrical surface.

Designed to capture high quality images of fingerprints from the cylindrical surfaces of bullet casings, pens and handtools etc., the CSU uniformly rotates items of evidence while the attached Crime-lite®Imager or DCS workstation captures, stitches and blends a series of images together to create a single 2D image of the fingermark.

Using the CSU, items of evidence that had previously presented a significant challenge to forensic photographers can now be quickly and easily 'unwrapped' for examination and enhancement.

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