# Crime-lite® I M A G E R



Semi-Automated Workstation for FINGERPRINT PHOTOGRAPHY

Illuminate >> Capture >> Enhance



**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.

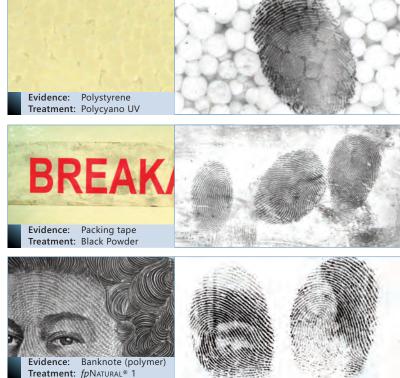


# Delivers consistantly impressive images of fingerprints on a wide range of evidence types

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.





# 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:

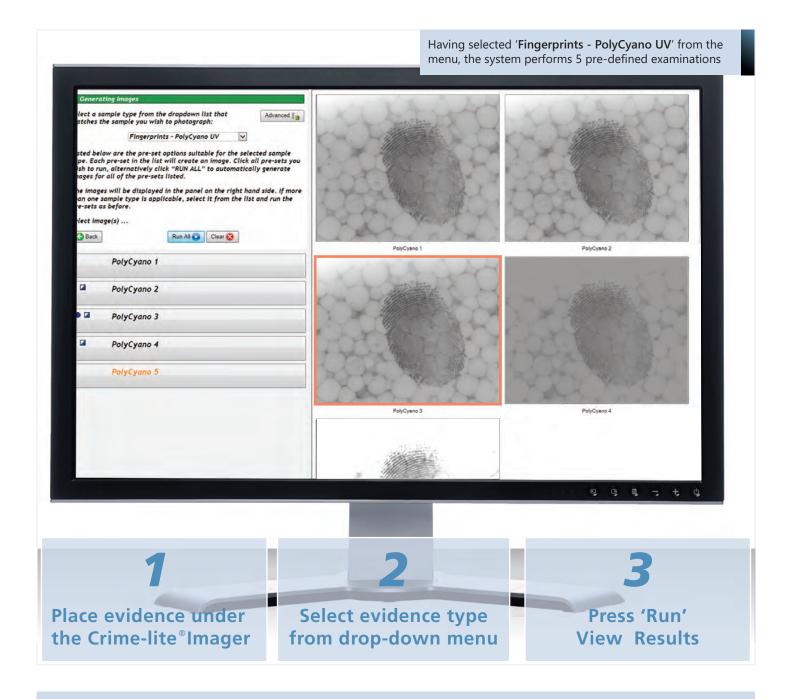
- 32x high intensity narrowband LEDs capable of producing 98 colour combinations
- 4x powerful Vis/IR halogen lamp capsules
- Optional Vis/IR continuous narrowband illumination source, 400-1000nm

## 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.





# 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	<ul> <li>UV-Vis-IR sensitive</li> <li>High speed GigE connectivity</li> <li>For full camera specification please contact sales@fosterfreeman.com</li> </ul>
	35 mm lens	<ul><li>35mm focal length</li><li>62mm x 52mm field of viewl</li></ul>
Contextual Imaging	2MP colour video camera	<ul><li>Autofocus</li><li>240mm horizontal field of view</li></ul>
Camera Lens Filters	Long pass filters	• 400nm, 455nm, 495nm, 530nm, 550nm, 570nm, 590nm, 610nm, 630nm, 645nm, 665nm, 695nm, 715nm, 780nm, 850nm
	Short pass filters	<ul><li>730nm, 660nm, 610nm and 550nm</li><li>Polarising filter</li></ul>
Illumination	Multi-wavelength ringlight	<ul> <li>32x high efficiency LEDs providing</li> <li>4x White 400-700nm</li> <li>4x Blue/Green 445-510</li> <li>4x UV 350-380nm</li> <li>4x Green 480-560nm</li> <li>4x Orange 570-610nm</li> <li>4x Blue 420-470nm</li> <li>4x Red 600-660nm</li> </ul>
	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	<ul><li>25mm f/1.6 wide-angle lens</li><li>FOV 97mm x 81mm</li><li>Resolution 650 pixels/inch</li></ul>
50mm Lens Order Code: QCL/CI/03	<ul><li>50mm f/1.8 narrow-angle lens</li><li>FOV 42mm x 35mm</li><li>Resolution 1500 pixels/inch</li></ul>
25mm Quartz Lens Order Code: QCL/CI/22	<ul><li>For UV imaging 230-400nm</li><li>FOV 97mm x 81mm</li><li>Resolution 650 pixels/inch</li></ul>

# **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	<ul><li>24" widescreen display</li><li>Resolution: 1920 x1200</li></ul>
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	<ul> <li>Fits over existing work surfaces</li> <li>H44 x W850 x D820mm</li> <li>Magnetic work top</li> <li>Requires motorised column (QCL/CI/05)</li> </ul>
Floor Stand Order Code: QCL/CI/09	<ul> <li>Structural aluminium frame</li> <li>H720 x W850 x D722mm</li> <li>Magnetic work top</li> <li>Requires motorised column (QCL/CI/05)</li> </ul>
Motorised Column Order Code: QCL/CI/05	<ul><li>1.5m adjustable column</li><li>Up to 1030mm vertical travel</li><li>Focus adjustment control</li><li>24V-DC motor</li></ul>
Portable Stand Order Code: QCL/CI/04	<ul> <li>Lightweight aluminium stand</li> <li>H365 x W376 x D281mm</li> <li>Includes adjustable article stand</li> <li>Weight 1.5kg</li> </ul>
Carry Case Order Code: QCL/CI/08	<ul> <li>Holds Crime-lite®Imager, portable stand and accessories</li> </ul>

# **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.





