



GEL IMAGING

FLUORESCENCE AND COLORIMETRIC STAINS

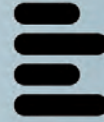


VILBER LOURMAT



GEL IMAGING

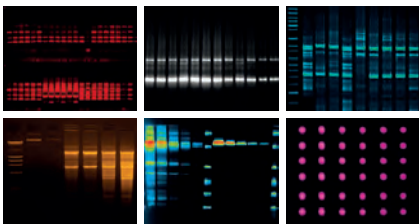
The range



VILBER LOURMAT

Best in class

- Outstanding sensitivity
- Lowest noise floor
- Superior resolution
- Largest range of applications
- Largest field of view
- Fastest acquisition process
- Best image clarity
- Widest dynamic range
- Best raw data protection
- Quantitative stability
- Hole Accumulation Diode (HAD) technology
- Widest build-in application library
- Best band revelation
- Best signal response linearity
- Clarity™ technology
- Best camera passive cooling
- Exclusive Apps Studio library
- 3D Dynamic Scan technology

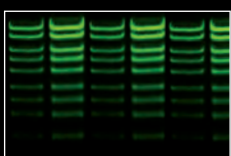


The speed of light

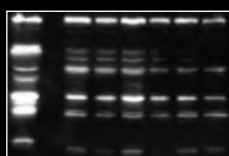
Our imaging systems are high-end scientific camera platforms, designed to extract the lowest level of detection from your DNA, RNA or protein sample. Whether you need a dedicated gel-documentation system or a multimodal platform for fluorescence, colorimetric stains and colony dishes imaging, we can provide you the best solution.

Our superior sensitivity, resolution and dynamics provide optimal performance across a large array of applications. There is no need to compromise. Our imaging systems are ready to work for your most demanding fluorescence or visible light applications.

Our advanced set of performance is ideal to image with high fidelity and to allow quantitative scientific measurements. Our imaging systems' cameras use the latest generation of sensors and semi-conductors. Our HAD technology achieves high sensitivity and improves our camera spectral sensitivity characteristics. Combined with our HAD technology and our camera passive cooling, our imaging systems are ideal for publication, quantification and documentation grade imaging.



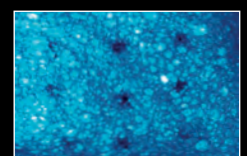
Protein gel



RNA gel



DNA gel



Bacteria imaging



QUANTUM ST5

Ideal for documentation, quantification & publication
High-end camera
Semi-automatic system

- UV fluorescence
- SkyLight fluorescence
- Blue light imaging
- White light imaging
- ST5 camera
- Image resolution: 7.6 megapixels
- Native resolution: 1600x1200

Apps Studio
3D Dynamic Scan
Clarity™

DNA/RNA detection
Protein detection
Colony dishes imaging
Flask grown colonies imaging
Microplate imaging

INFINITY ST5

Ideal for documentation, quantification & publication
High-end camera
Fully automatic system

- UV fluorescence
- SkyLight fluorescence
- Blue light imaging
- White light imaging
- ST5 camera
- Image resolution: 7.6 megapixels
- Native resolution: 1600x1200

Apps Studio
3D Dynamic Scan
Clarity™

DNA/RNA detection
Protein detection
Colony dishes imaging
Flask grown colonies imaging
Microplate imaging

BIO-PRINT ST4

Ideal for documentation & quantification
Industry standard camera
Semi-automatic system

- UV fluorescence
- Blue light imaging
- White light imaging
- ST4 camera
- Image resolution: 5.5 megapixels
- Native resolution: 1360x1024

Apps Studio
3D Dynamic Scan
Clarity™

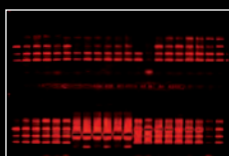
DNA/RNA detection
Protein detection
Colony dishes imaging
Flask grown colonies imaging
Microplate imaging

E-Box VX5

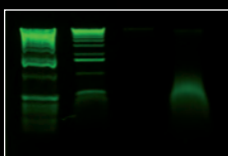
Ideal for documentation & quantification
High-end camera
Stand-alone system

- UV fluorescence
- Blue light imaging
- White light imaging
- ST5 camera
- Image resolution: 2 megapixels
- Native resolution: 1600x1200

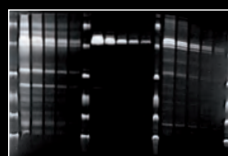
DNA/RNA detection
Protein detection
Colony dishes imaging
Flask grown colonies imaging
Microplate imaging



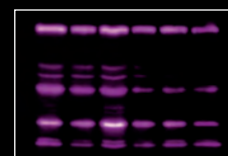
Multi-layer gel



PCR control



1D gel



Fluorescence detection



GEL IMAGING

Applications



VILBER LOURMAT

UV master

VILBER has been the UV fluorescence expert since 1951. Our own filters are designed to transmit specific ultraviolet rays and to absorb most of the visible light produced by the UV tubes. They provide the maximum UV transmittance all over their surface.

This output is reinforced with the use of our exclusive Ondulex® reflector, especially polished to reflect the maximum of the light to the outside.

Our own VILBER UV lamps emit highly concentrated UV radiation. Their spectral energies provide an optimum output for a large number of applications in the life science such as gel, plate or dish visualization and documentation.

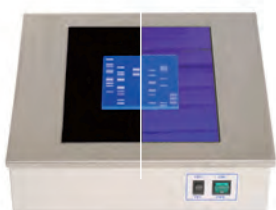


Fig.1: Super-Bright MX UV versus standard UV transilluminator. The Super-Bright MX stops all the visible light and improves the quality of gel visualization and documentation.

The Apps Studio

The Apps Studio is a revolutionary approach to imaging. The Studio is an innovative library of applications which contains more than 40 different protocols for your gel, colony dish, autorad, microplate and other fluorescent or colorimetric samples. The protocols are easily accessible and gathered into three master protocols: DNA/RNA gels, protein gels, visible light samples, and others.

The Studio contains the excitation and the emission spectra of the main fluorophores used in modern molecular biology laboratory. It also suggests the best possible system configuration in terms of excitation light source, emission filter and sensitivity level. The Apps Studio ensures reproducibility and one click image acquisition for the best ease of use.

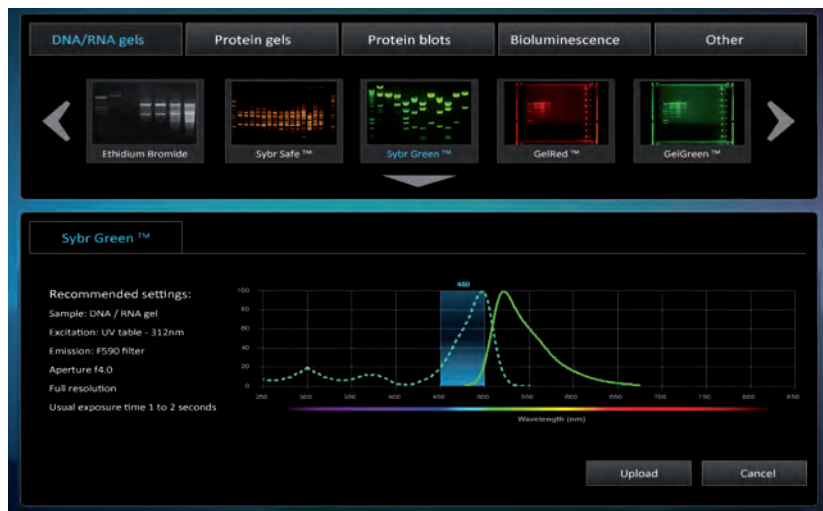
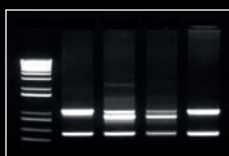
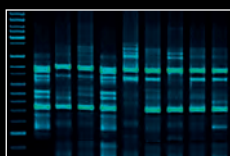


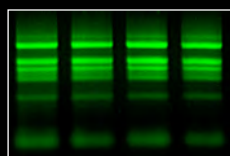
Fig.2: Apps Studio contains more than 40 different protocols for your fluorescence, colorimetric stains and colony dishes imaging.



Ethidium Bromide



Midori dye



GelGreen



Ethidium Bromide



DNA/ RNA / Protein fluorescence

Fluorescence is the main method used for gene expression and protein detection. The fluorophore absorbs the excitation light, reaching a higher energy state. By returning to its former state, it emits fluorescent light. The aim of the imaging system is to separate the emitted light from the excitation light in order to obtain an optimum sample image.

Our systems can accommodate up to 6 excitation channels in the UV and visible area. This is ideal for a large array of applications such as DNA or RNA gels, 1D protein fluorescent gels, stain free gels... A large number of dyes could be used such as Ethidium Bromide, Sybr-Safe, Sybr Green, Gel-Red, Gel-Green, Sybr-gold, GFP, Pro-Q Emerald 300, Sypro-Ruby, FITC, DAPI...

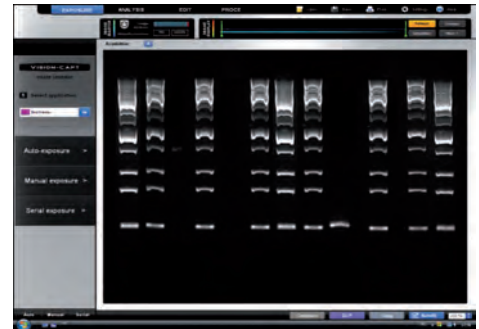


Fig.3: Ethidium Bromide gel imaging with the Vision-Capt software

Colorimetric stains

A colorimetric stain can be used for protein detection after the bands have been separated by electrophoresis. The colorimetric stains require visible light illumination for sample visualization and documentation. Our systems offer several reflective and transmitting illumination options for colorimetric stains. Our white light screen provides unmatched white light illumination. In our darkroom, LED based reflective epi-white light excitation provides for even white light illumination compared to other systems with standard bulb. A large number of stains could be used such as Coomassie blue, Silver stain, Ponceau S Red, Copper stain, Zinc stain... Our systems are ideal for colorimetric stained protein gels, X-ray film imaging, autorads, SSCP gels, colony dish and flask imaging...

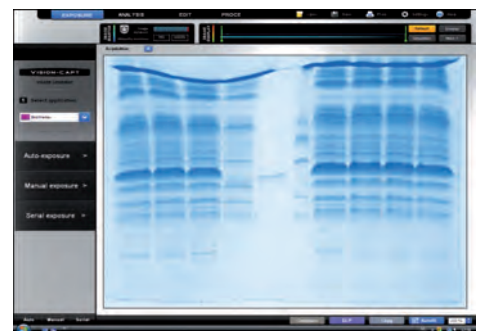
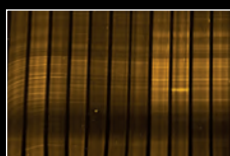


Fig.4: Our imaging systems can accommodate up to 6 excitation and emission channels in the visible and UV area



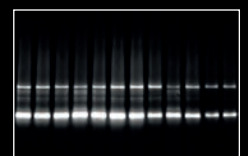
GelRed



SYBR Gold



SYBR Safe

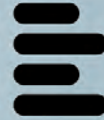


Nancy 520



VISION-CAPT

Software



VILBER LOURMAT

Precise and intuitive

The Vision-Capt software has an outstanding ease of use.

Our system and software are ergonomically designed. The simple and self-understandable interface is very user friendly.

Combined with the Apps Studio, the protocol driven image acquisition is as quick as intuitive: adjust your exposure, save, print or quantify.

Thanks to the auto-exposure mode, the system will automatically capture the best image with just one click. There is no need for exposure time guessing and image stacking. The Vision-Capt autoexposure mode automatically provides you the best possible image from your sample.



Fig.5: The Vision-Capt interface is well organized and intuitive

Dynamic 3D Scan

A New Direction for Imaging Technology

The Vision-Capt Dynamic 3D scan is a revolutionary approach in the field of molecular imaging. The 3D Dynamic Scan images your sample in real time and reconstructs the data to create live three dimensional models. The 3D reconstruction provides direct information regarding the image dynamic, background level and protein or DNA quantity. A little change of exposure time will refresh the 3D view automatically. The saturation effect can be controlled live before the image is frozen.

The Vision-Capt Dynamic 3D scan opens a new frontier for protein or DNA imaging. 3D modeling will change the way you see your sample into 3D results.

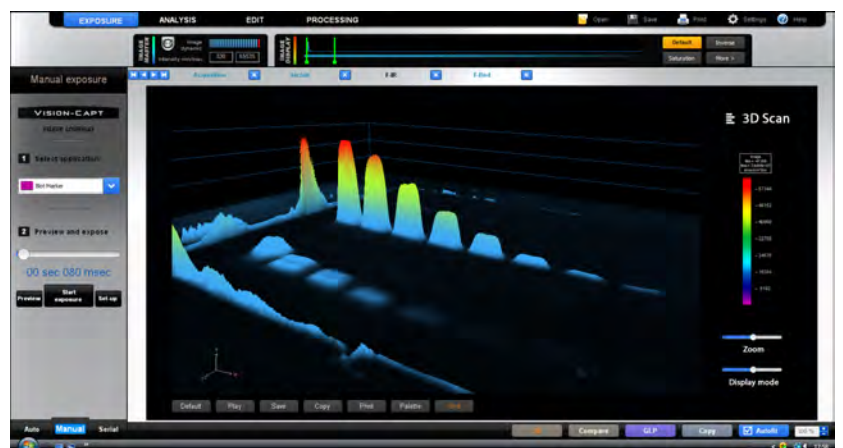


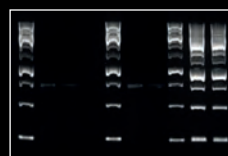
Fig.6: The 3D scan is performed while the image is acquired by the camera, opening new area for molecular biology



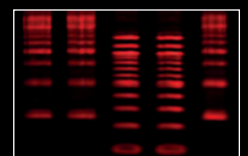
1D gel



Microtitration plate



Ethidium Bromide



GelRed



Superior quantitative results

Our Vision-Capt software is directly integrated with the Bio-1D software for quantification and normalization. Bio-1D is a sophisticated and intuitive analysis software designed for virtually any fluorescence or chemiluminescence sample. The software combines the power of a comprehensive set of analytical tools and automatic functions in an incredibly ease of use environment. It includes 8 different analysis modules from molecular weight calculation to volume quantification, through microtitration, colony counting, distance calculation and protein quantification.

The analysis can be saved as a template and re-used for further analysis to facilitate routine analysis. All result tables and graphics can be printed or exported in a Windows® compatible format.



Fig.7: The Bio-1D Quantification software is smoothly integrated in the Vision-Capt interface

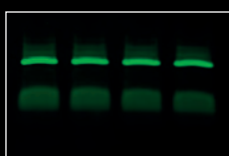
Image Master Assistant

Our exclusive Image Master helps you to obtain the optimum image at a glance. It automatically monitors the maximum and the minimum intensity obtained on the image, indicates it's dynamic, signal to noise ratio, and warns you about pixel saturation.

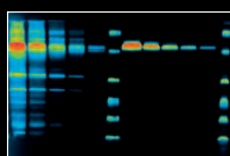
The Image Master informs you when the raw data are affected by a post-processing function such as background subtraction or image addition. The Image Master is simply perfect for quantification and publication as it helps you to keep the control on the image, making sure your image is always appropriate whatever its use.



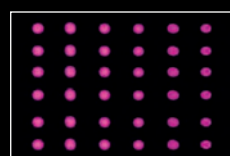
Fig.8: The Image Master Assistant is a powerful tool to control your sample image quality. A modification of the image display does not modify the Image Master data.



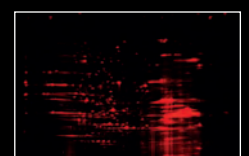
GelGreen



FITC



DAPI



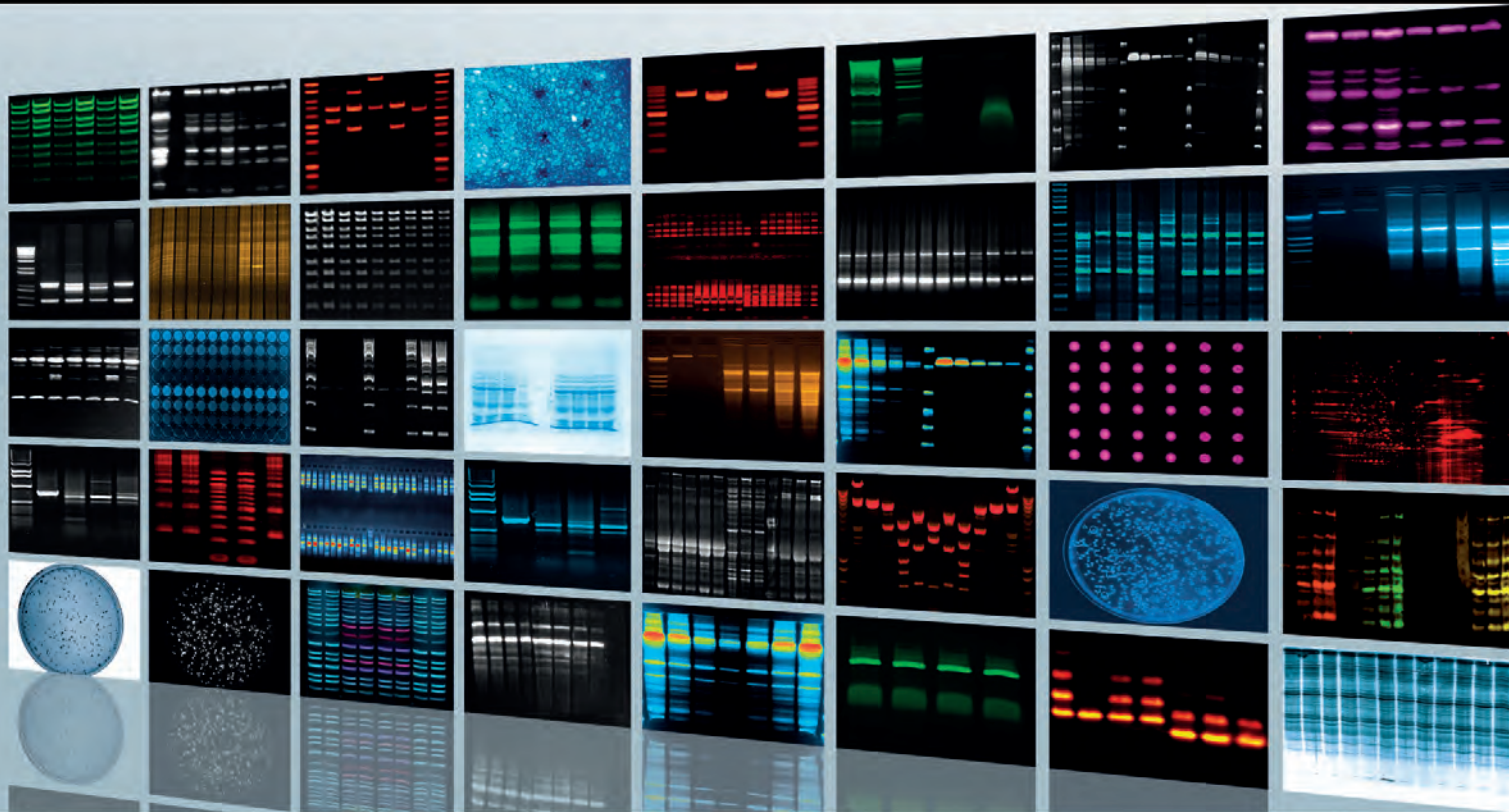
2D gel

GEL IMAGING



Performance in every detail





GEL DOCUMENTATION

- 10 | Infinity ST5
- 12 | Quantum ST5
- 14 | Bio-Print ST4

STAND-ALONE SYSTEMS

- 18 | E-Box VX5
- 20 | Doc-Print VX5

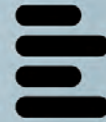
IN DEPTH

- 22 | System configurations
- 23 | Specifications
- 23 | Glossary



INFINITY ST5

Spectra



VILBER LOURMAT

☰ One click to the image

The Infinity ST5 has unrivalled ease of use thanks to its computer controlled lighting. With just one click, the system will automatically capture the best possible image. Select your application, click on Start Exposure and automatically the system will light on the transilluminator, autoexpose and switch off the UV. The image acquisition process is as quick as instinctive.

An optional motorized lens with aperture position feedback complements this fully automatic approach. This configuration comes with autofocus function as standard.

The user-interface has rich features and guides you into the advanced functions such as the AppsStudio or the serial exposure mode.

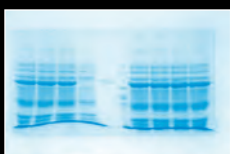
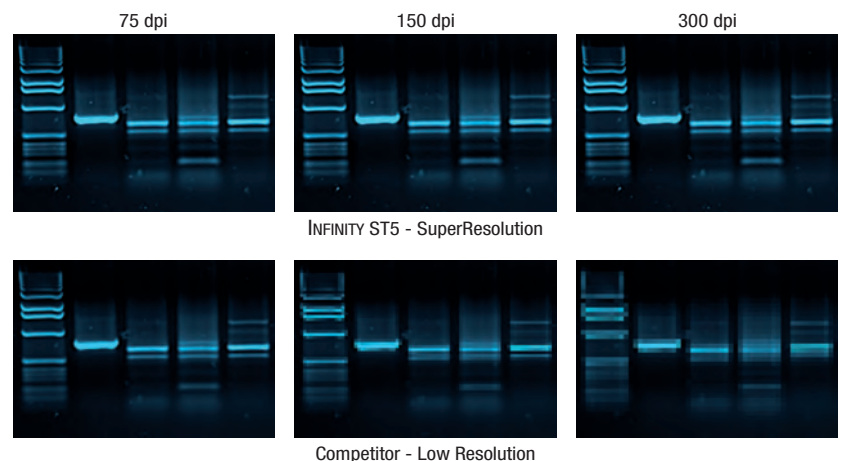


SuperResolution

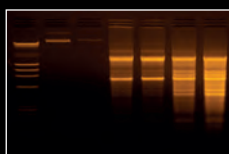
The Infinity ST5 technology provides unparalleled 7.6 megapixel resolution without compromising read noise, dynamic range, field of view and sensitivity. This means up to 4 times more accurate and more quantitative data compared to competitors. Our ST5 scientific grade CCD camera has been specifically designed for scientific imaging and signal measurement.

The Infinity ST5 SuperResolution combined with our advanced HAD CCD technology offers SuperResolution without pixelisation and unrivalled sensitivity. Our new generation HAD technology produces excellent results in low light conditions, with noise level being half that of previous levels. This new design gives dramatic improvements in light sensitivity which makes the system perfect under the gel imaging low light conditions.

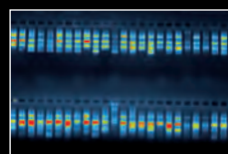
As a result, you experience a higher visual image with a very high level of details and more quantitative information.



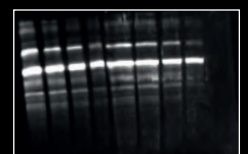
Coomassie blue



PCR control



Multi-layer gel



1D gel



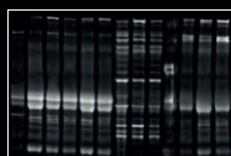
Key features

- Fully-automatic system
- "One click" for image acquisition
- Computer control of the lightning
- Autoexposure
- 6 excitation channels in the UV and visible area
- 40 fluorescence dyes and colorimetric stains
- predefined imaging protocols at your fingertips
- Super speed image acquisition
- 3D Dynamic Scan Technology
- Long life lasting visible light LED for thousands of hours of use
- Intuitive Apps Studio interface
- Camera passive cooling for low light imaging
- HAD™ Technology for enhanced sensitivity
- CFR21 Part 11 ready
- Full GLP compliance
- IQ/OQ/PQ template available
- Clarity™ Technology for razor sharp band revelation
- SuperResolution™ Technology for ultimate megapixel imaging
- Scientific grade ST5 CCD camera

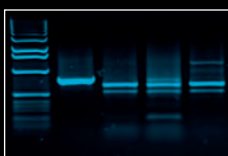
- Pure image integrity and raw data protection
- ImageMaster™ Technology to obtain the optimum image at a glance
- Free Vision-Capt software for image acquisition and image analysis
- Molecular weight calculation, band quantification, colony counting and distance calculation
- Stainless steel, aluminium and steel darkroom for the best robustness
- Large door opening
- Optional motor driven zoom lens
- Large field of view
- Neutral fielding
- Reproducible and comparable quantification data
- Scientific TIFF file or proprietary file format
- 16-bit pixel depth
- USB2 interface
- Multi-position filter slide
- 10 emission filters available
- Choice of standard UV, SuperBright UV or SkyLight transilluminator
- White & blue light conversion screens available

Configurations

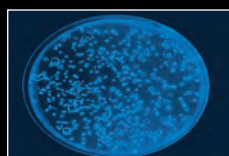
- Infinity ST5 – 1100 series
- ST5 camera
- Fully automatic systems
- Computer control of the lightning
- Multi-position filter wheel
- Transilluminator and F590 emission filter included for standard gel applications (F999 filter for SkyLight)
- Epi visible light - LED
- Vision-Capt software
- Apps Studio
- 3D Dynamic Scan
- Molecular weight calculation
- Band quantification
- Colony counting
- Distance calculation
- Options
- SkyLight transilluminator
- Super-Bright MX UV transilluminator
- White light or blue light conversion screen
- Choice of 10 emission filters
- Choice of manual or motorized zoom lens



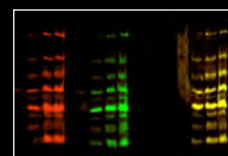
DNA detection



RNA detection



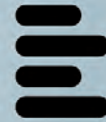
Petri Dish



Qdot multiplexing



QUANTUM ST5

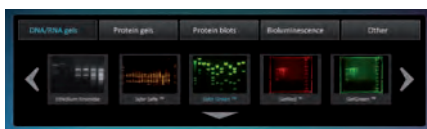


VILBER LOURMAT

Versatile

As standard, the Quantum ST5 system is ideal for a wide range of fluorescence applications. Thanks to different options you can also customize your own system or upgrade later to add versatility and imaging experiments:

- Filtered UV epi-illumination modules
- Super-Bright technology for enhanced imaging
- SkyLight technology for Ethidium Bromide imaging without UV
- UV to white light conversion screen for white light samples such as protein gels or autoradiographs
- UV to blue light conversion screen for dyes such as GFP II™, SYBR Green™ or Sypro Orange™.
- Bio-1D Advanced image analysis software
- Up to 7 filter positions
- Choice of 10 emission filters

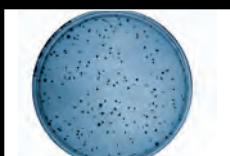
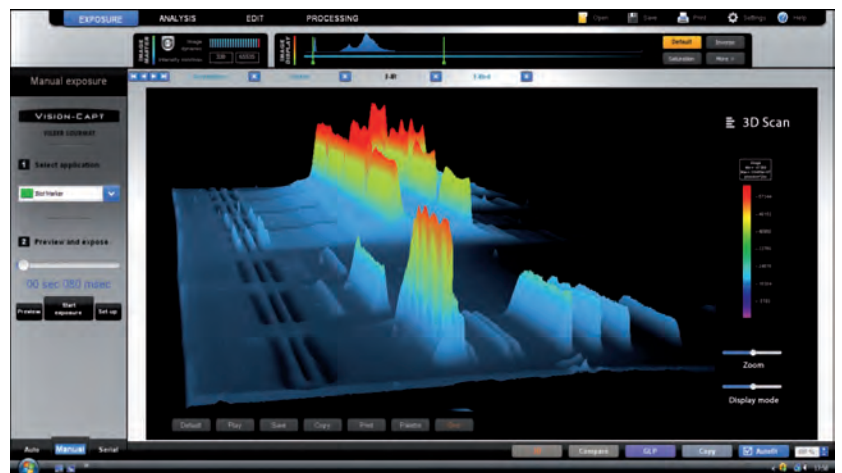


The laboratory standard

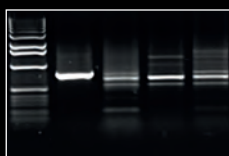
The Quantum ST5 is the laboratory standard for DNA and protein gel imaging. The system is based on an advanced set of performance ideal to achieve high fidelity and quantitative scientific measurement. Its excellent imaging properties guarantee the best performance for nucleic acid and protein samples.

The images generated allow for critical image analysis thanks to their high depth of data. Moreover, they can easily be printed out in an attractive way for the laboratory book.

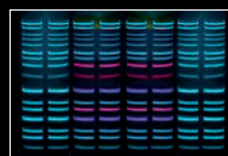
The Super-Bright UV illumination and filter technology enhances the image quality especially for DNA and RNA gels. Optional UV epi illumination sources (filtered 254 nm and 365 nm) allow, for instance, for TLC or GFP images. The compact darkroom with integrated filter wheel is made entirely of metal, stainless steel and aluminium. For comfortable work, the integrated UV or SkyLight transilluminator can be pull-out completely.



Petri dish



Ethidium Bromide



Qdot multiplexing



GelRed



Key features

- Intuitive user interface
- Autoexposure
- 6 excitation channels in the UV and visible area
- 40 fluorescence dyes and colorimetric stains predefined imaging protocols at your fingertips
- Super speed image acquisition
- 3D Dynamic Scan Technology
- Long life lasting visible light LED for thousands of hours of use
- Intuitive Apps Studio interface
- Camera passive cooling for low light imaging
- HAD™ Technology for enhanced sensitivity
- CFR21 Part 11 ready
- Full GLP compliance
- IQ/OQ/PQ template available
- Clarity™ Technology for razor sharp band revelation
- SuperResolution™ Technology for ultimate megapixel imaging
- Scientific grade ST5 CCD camera
- Pure image integrity and raw data protection
- ImageMaster™ Technology to obtain the

- optimum image at a glance
- Free Vision-Capt software for image acquisition and image analysis
- Molecular weight calculation, band quantification, colony counting and distance calculation
- Stainless steel, aluminium and steel darkroom for the best robustness
- Large door opening
- Optional motor driven zoom lens
- Large field of view
- Neutral fielding
- Reproducible and comparable quantification data
- Scientific TIFF file or proprietary file format
- 16-bit pixel depth
- USB2 interface
- Multi-position filter slide
- 10 emission filters available
- Choice of standard UV, SuperBright UV or SkyLight transilluminator
- Choice of filtered dual EPI UV 254nm and 365nm
- White light and blue light conversion screen available

Configurations

Quantum ST5 – 1300 series

- ST5 camera
- Multi-position filter wheel
- Transilluminator and F590 emission filter included for standard gel applications (F999 filter for SkyLight)
- Dual Epi UV 254nm & 365nm. Epi visible light - LED

Quantum ST5 – 1100 series

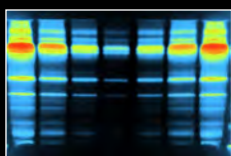
- ST5 camera
- Multi-position filter wheel
- Transilluminator and F590 emission filter included for standard gel applications (F999 filter for SkyLight)
- Epi visible light - LED

Vision-Capt software

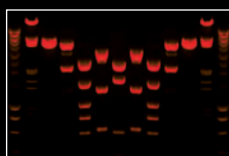
- Apps Studio
- 3D Dynamic Scan
- Molecular weight calculation, band quantification, colony counting
- Distance calculation

Options

- SkyLight transilluminator
- Super-Bright MX UV transilluminator
- White light or blue light conversion screen
- Choice of 10 emission filters
- Choice of manual or motorized zoom lens



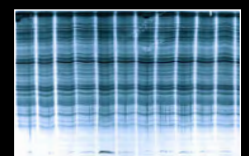
FITC



DNA PCR



SYBR Gold



Coomassie blue



BIO-PRINT ST4

SuperMega



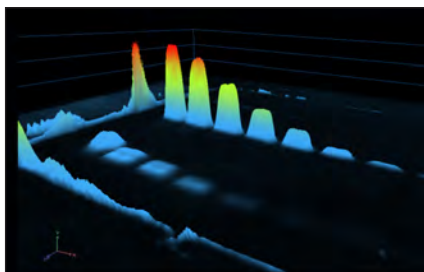
VILBER LOURMAT

New CN-900 darkroom

The CN-900 darkroom offers high quality in a compact design. The integrated UV transilluminator can be easily slide out for preparative work or sample positioning. The Super-Bright UV illumination and filter technology enhances the image quality especially for DNA and RNA gels.

The CN-900 darkroom provides the best white light imaging quality and maximum lighting efficiency. The powerful overhead LED modules provide the best homogeneity and minimize the possible shades. Our efficient LED lighting is economically efficient and environmentally friendly.

Steel, stainless steel and aluminium are the main components of the CN-900. The robust darkroom is designed to last.

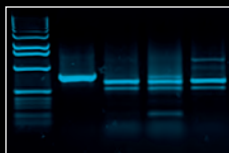
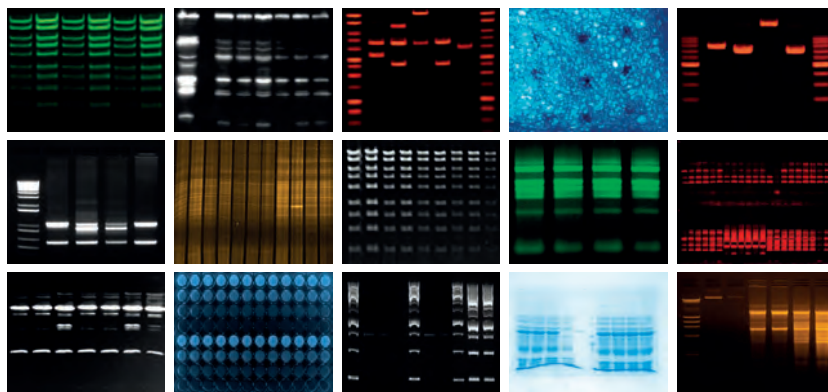


Performance at a budget

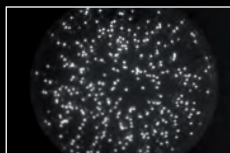
The Bio-Print ST4 is the ideal system for molecular biology laboratories that do not want to compromise performance with budget constraints. The Bio-Print ST4 includes a scientific CCD camera with a SuperResolution of 5.5 megapixels. Its passive cooling maximizes the signal and minimizes the background noise to obtain the best signal to noise ratio for the lowest limit of detection.

With the Bio-Print ST4 gel documentation systems, the image acquisition and the analysis software are completely merged into each other. This allows easy and reliable visualization, storage and quantification. Bio-Print ST4 has an outstanding ease of use. The system and software are ergonomically designed. The simple and self-understandable interface is very user friendly.

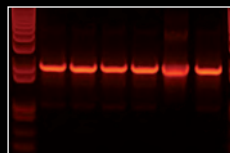
Bio-Print ST4 is compatible with several digital printing options that generate high resolution images by a single push of a button. Inkjet, laserjet or thermal printer can be connected to the system for inexpensive laboratory notebook printouts. Thermal printer provides instant vibrant glossy printouts.



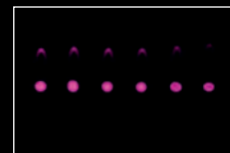
RNA detection



Petri dish



PCR gel



Dot blot



Key features

- Intuitive user interface
- Autoexposure
- Super speed image acquisition
- 3D Dynamic Scan Technology
- Long life lasting visible light LED for thousands of hours of use
- Camera passive cooling for low light imaging
- HAD™ Technology for enhanced sensitivity
- CFR21 Part 11 ready
- Full GLP compliance
- IQ/OQ/PQ template available
- Clarity™ Technology for razor sharp band revelation
- SuperResolution™ Technology for ultimate megapixel imaging
- Scientific grade ST4 CCD camera
- Pure image integrity and raw data protection
- ImageMaster™ Technology to obtain the optimum image at a glance
- Free Vision-Capt software for image acquisition and image analysis

- Molecular weight calculation, band quantification, colony counting and distance calculation
- Stainless steel, aluminium and steel darkroom for the best robustness
- Large door opening
- Optional motor driven zoom lens
- Neutral fielding
- Scientific TIFF file or proprietary file format
- 16-bit pixel depth
- USB2 interface
- Choice of standard UV or SuperBright UV transilluminator
- White light and blue light conversion screen available

Configurations

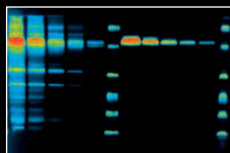
Bio-Print ST4 SuperMega – 900 series
 ST4 camera
 Transilluminator and F590 emission filter included for standard gel applications
 Epi visible light - LED

Vision-Capt software
 3D Dynamic Scan
 Molecular weight calculation
 Band quantification
 Colony counting
 Distance calculation

Options
 Super-Bright MX UV transilluminator
 White light or blue light conversion screen
 Choice of manual or motorized zoom lens



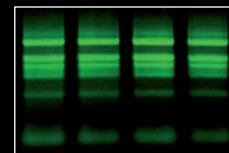
RNA gel



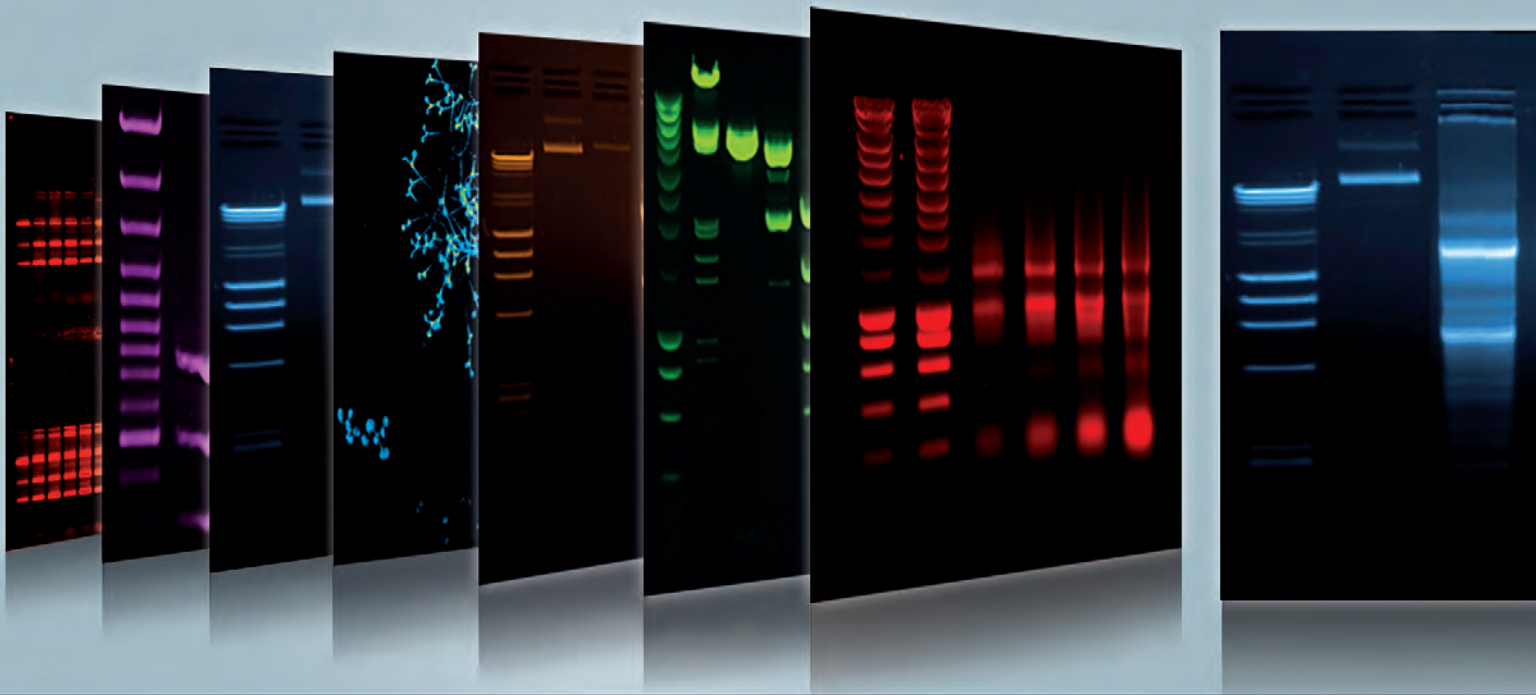
Protein gel



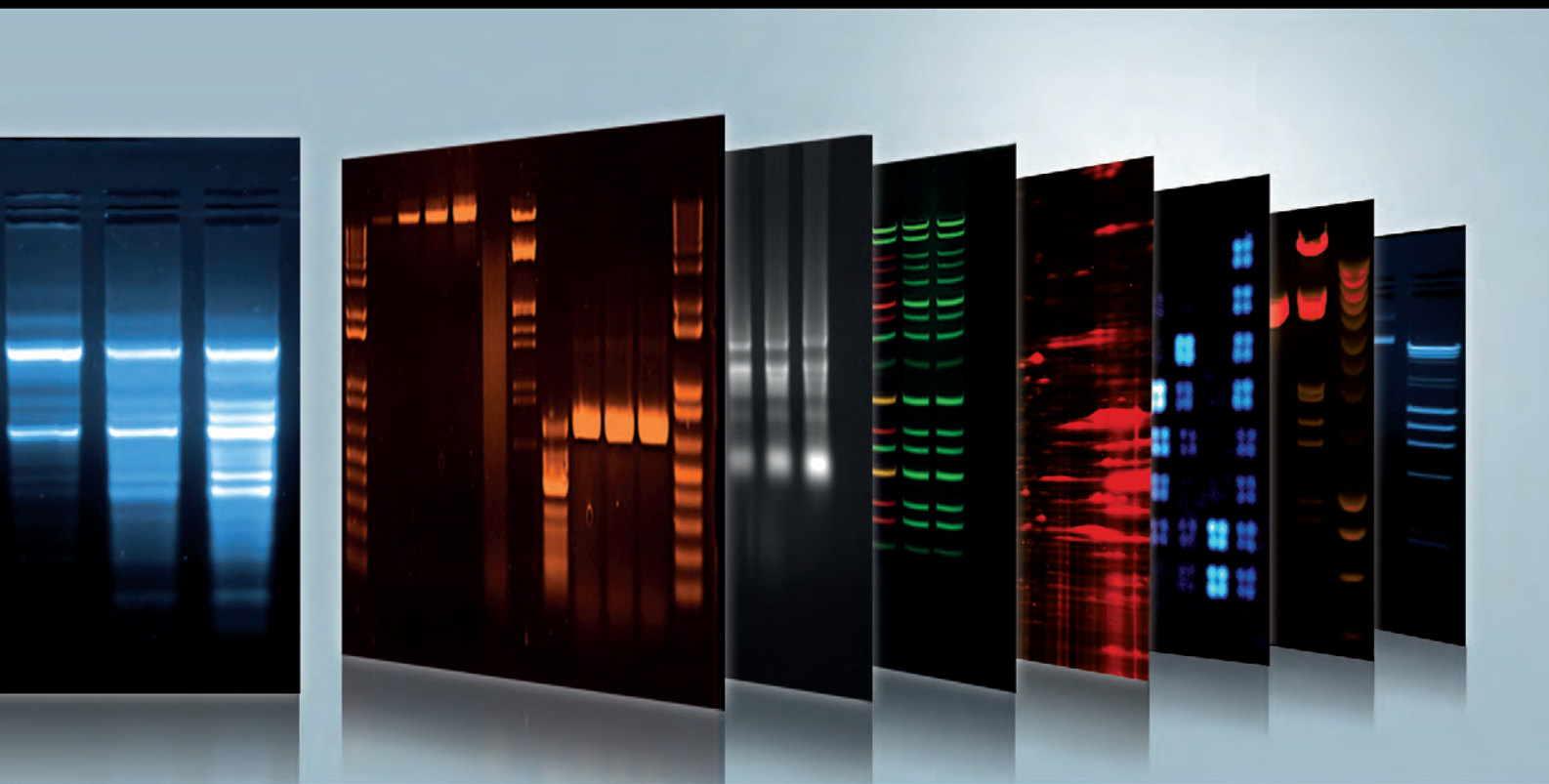
DNA gel



PCR control



VILBER LOURMAT



GEL DOCUMENTATION

- 10 | Infinity ST5
- 12 | Quantum ST5
- 14 | Bio-Print ST4

STAND-ALONE SYSTEMS

- 18 | E-Box VX5
- 20 | Doc-Print VX5

IN DEPTH

- 22 | System configurations
- 23 | Specifications
- 23 | Glossary



E-Box VX5



VILBER LOURMAT

Fantastic ease of use

E-Box VX5 has an unrivalled ease of use. The image acquisition process is as quick as intuitive: adjust your exposure, freeze, save or print. The user-interface has rich features and guides you into the advanced functions such as image format selection or deleting an image. The system is ergonomically designed with a simple and easy-to-clean keyboard.

Connect your E-Box VX5 to your network and download your gel image from the comfort of your office. The image acquisition is performed at your bench and the image is saved in the internal memory of the E-Box. Then, from your office, you can easily download the image using the Vision-Capt software.



Fig.9: E-Box VX5 user interface

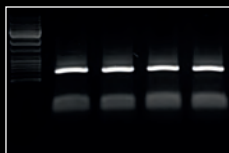
Stand-alone legend

E-Box VX5 is a complete stand-alone system with fantastic ease of use & ease to clean. No PC is required. The system combines a highly sensitive CCD camera, a USB key media drive, network capability and 16-bit imaging. Image acquisition is enhanced with a display of the image dynamic and an automatic pixel saturation warning. These ensure optimum quality of the final image which can then be instantly printed or saved for analysis.

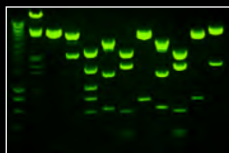
The control elements and the large, bright and easy to read display are integrated into the cabinet. Thus, a lot of precious lab space can be saved. Moreover a fully slideout UV transilluminator on stable pull-out rails is incorporated in the system for comfortable work.

By the push of only one button, high-resolution images of DNA, RNA or protein gels are created within a few seconds. The images can either be printed out directly or saved in the internal storage. Transfer of the data to a PC is possible in different ways, if necessary.

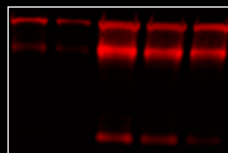
E-Box VX5 is compatible with several digital printing options that generate high resolution images by a single push of a button. Inkjet or thermal printer can be connected to the system for inexpensive laboratory notebook printouts. Thermal printer provides instant vibrant glossy printouts.



Ethidium Bromide



SYBR Green



GelRed



SYBR Gold

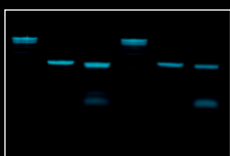


Key features

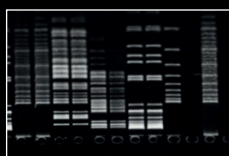
- Intuitive user interface
- Autoexposure
- 4 USB port
- 8 inch LCD screen
- Network connectivity
- Super speed image acquisition
- Long life lasting visible light LED for thousands of hours of use
- Camera passive cooling for low light imaging
- HAD™ Technology for enhanced sensitivity
- Full GLP compliance
- IQ/OQ/PQ template available
- Scientific grade ST5 CCD camera
- Pure image integrity and raw data protection
- ImageMaster™ Technology to obtain the optimum image at a glance
- Free Vision-Capt software for image enhancement and image analysis
- Molecular weight calculation, band quantification, colony counting and distance calculation
- Stainless steel, aluminium and steel darkroom for the best robustness
- Wide access door with UV safety shutoff
- Scientific TIFF file or proprietary file format
- 16-bit pixel depth
- USB2 interface
- Choice of standard UV or SuperBright UV transilluminator
- White light and blue light conversion screen available

Configurations

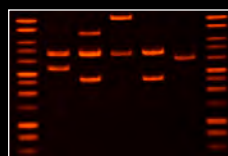
- E-Box VX5 series
- ST5 camera
- Multi-position filter wheel
- Transilluminator and F590 emission filter included for standard gel applications
- Epi visible light - LED
- Vision-Capt software
- Image enhancement
- Text annotation
- Molecular weight calculation
- Band quantification
- Colony counting
- Distance calculation
- Options
- Super-Bright MX UV transilluminator
- White light or blue light conversion screen



SYBR Safe



Ethidium Bromide



Gel Red



SYBR Safe



DOC PRINT VX5



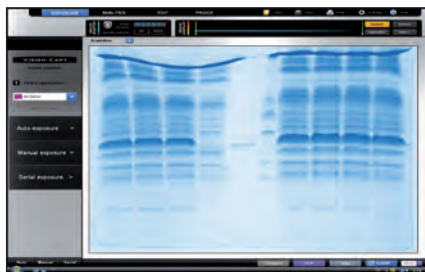
VILBER LOURMAT

Complimentary software

Vision-Capt is the free software supplied with the Doc-Print VX5 systems. This very user-friendly software is designed for image analysis and includes four main modules: molecular weight calculation, band quantification, distance calculation (RF) and colony counting

It also includes image enhancement features to enable editing of comments, inversion, contrast / brightness adjustment as well as colorimetry. Designed by molecular biologists, the Vision-Capt software is intuitive and very easy to use: just few clicks are necessary to obtain sophisticated results.

All result tables and graphics can be printed or exported in a Windows® compatible format. The image enhancement module prepares your image for publication thanks to a large choice of filters.



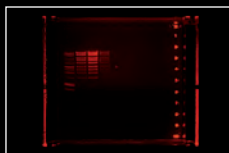
Easy and fun

Doc-Print VX5 is a stand-alone imaging system dedicated to basic gel documentation.

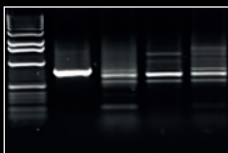
By the push of only one button, high-resolution images of DNA, RNA or protein gels are created within a few seconds. The images can either be printed out directly or saved in the internal storage.

Thanks to its built-in USB port, the images can be saved on a USB stick or printed on a thermal printer for instant hard-copy images. Doc-Print VX5 combines simplicity and economy for laboratories with budget in mind.

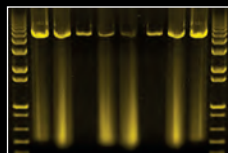
The large and excellently readable display is integrated in the control unit. Its operation is clear and comprehensible. The quick-shot button takes images with only one click. The scientific camera of the system ensures excellent image quality. The data obtained can be printed out or saved on an external drive via the USB port. The mobile hood with firmly installed camera fits on all Vilber transilluminators.



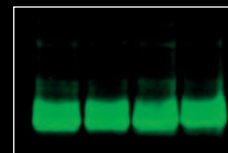
GelRed



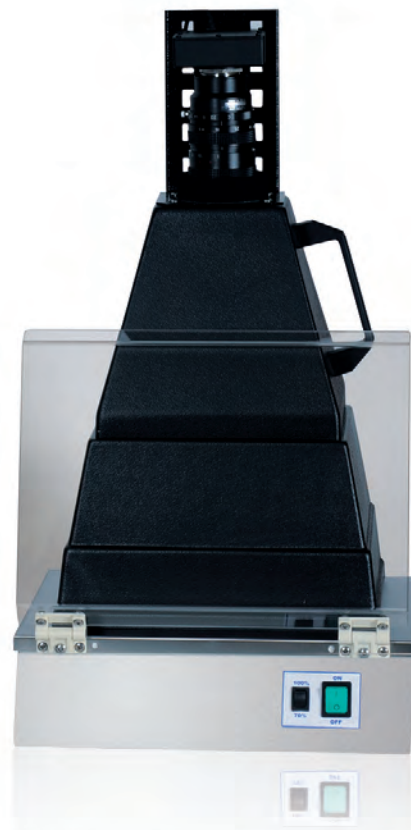
Ethidium bromide



SYBR Gold



SYBR Green



Key features

- Intuitive user interface
- Autoexposure
- USB port
- 8 inch LCD screen
- Super speed image acquisition
- Camera passive cooling for low light imaging
- HAD™ Technology for enhanced sensitivity
- Full GLP compliance
- Scientific grade ST5 CCD camera
- Pure image integrity and raw data protection
- ImageMaster™ technology to obtain the optimum image at a glance
- Free Vision-Capt software for image enhancement and image analysis
- Molecular weight calculation, band quantification, colony counting and distance calculation
- Stainless steel, aluminium and steel darkroom for the best robustness
- Scientific TIFF file or proprietary file format
- 16-bit pixel depth
- USB2 interface

- Choice of standard UV or SuperBright UV transilluminator
- White light and blue light conversion screen available

Configurations

Doc-Print VX5 Hood series

- ST5 camera
- ABS hood
- F590 emission filter for standard gel applications
- Transilluminator not included

Doc-Print VX5 1100 series

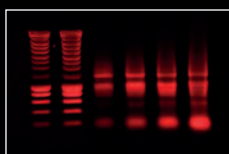
- ST5 camera
- Multi position filter wheel
- Transilluminator and F590 emission filter included for standard gel applications
- Epi visible light - LED

Vision-Capt software

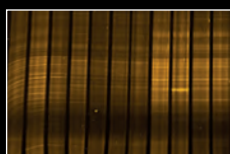
- Image enhancement
- Text annotation
- Molecular weight calculation
- Band quantification
- Colony counting
- Distance calculation

Options

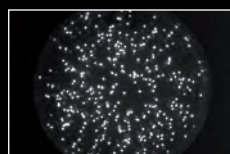
- Super-Bright MX UV transilluminator
- White light or blue light conversion screen



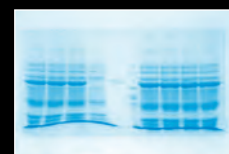
GelRed



SYBR Safe



Petri dish



Coomassie blue



GEL IMAGING

In details



VILBER LOURMAT

QUANTUM ST5

Ideal for documentation, quantification & publication
Semi-automatic system with auto-exposure

ST5 camera
Manual or motorized zoom lens

Vision-Capt software:
Apps Studio
3D Dynamic Scan
Clarity™
Image acquisition, image enhancement and image analysis

Multi-position filter wheel
7 filter positions

Slide-out transilluminator
Choice of single or dual wavelengths
Choice of standard UV, or SuperBright UV or SkyLight non-UV transilluminator
UV safety shutoff connected with the door
Automatic UV shutoff after few minutes of non-use
Optional UV protection screen

INFINITY ST5

Ideal for documentation, quantification & publication
Fully automatic system with auto-exposure and software control of the lighting

ST5 camera
Manual or motorized zoom lens

Vision-Capt software:
Apps Studio
3D Dynamic Scan
Clarity™
Image acquisition, image enhancement and image analysis

Multi-position filter wheel
7 filter positions

Slide-out transilluminator
Choice of single or dual wavelengths
Choice of standard UV, or SuperBright UV or SkyLight non-UV transilluminator
UV safety shutoff connected with the door
Automatic UV shutoff after few minutes of non-use
UV protection screen

BIO-PRINT ST4

Ideal for documentation & quantification
Semi-automatic system with auto-exposure

ST4 camera
Manual or motorized zoom lens

Vision-Capt software:
Apps Studio
3D Dynamic Scan
Clarity™
Image acquisition, image enhancement and image analysis

Filter screwer
1 filter position

Slide-out transilluminator
Choice of single or dual wavelengths
Choice of standard UV, or SuperBright UV transilluminator
UV safety shutoff connected with the door
Optional UV protection screen

E-Box VX5

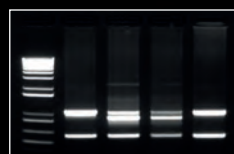
Ideal for documentation & quantification
Stand-alone system: no computer required
Semi-automatic system with auto-exposure

ST5 camera
Manual zoom lens

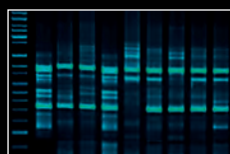
Vision-Capt software:
Apps Studio
3D Dynamic Scan
Clarity™
Image enhancement and image analysis

Multi-position filter wheel
4 filter positions

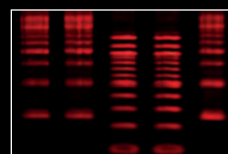
Slide-out transilluminator
Choice of single or dual wavelengths
Choice of standard UV, or SuperBright UV or SkyLight non-UV transilluminator
UV safety shutoff connected with the door
Automatic UV shutoff after few minutes of non-use
Optional UV protection screen



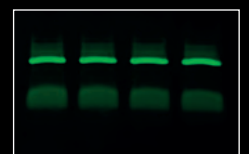
Ethidium Bromide



GFP



RNA gel



DNA gel



ST5 & ST4 specifications

ST5

Scientific grade CCD camera
Grade 0, zero defect
Image resolution: 7.6 megapixels
Native resolution: 1600(H)x1200(V)

Sony chip and processor
Passive cooling
HAD technology
USB connection
16-bit - 65 536 grey levels

Progressive scan – low dark current
Continuous variable shutter speed
High sensitivity for fluorescence detection
Live or exposure time modes
Binning options

ST4

Scientific grade CCD camera
Grade 0, zero defect
Image resolution: 5.5 megapixels
Native resolution: 1320(H)x1024(V)

Sony chip and processor
Passive cooling
HAD technology
USB connection
16-bit - 65 536 grey levels

Progressive scan – low dark current
Continuous variable shutter speed
High sensitivity for fluorescence detection
Live or exposure time modes
Binning options



Glossary

Background level:

Some degree of noise is always present in any electronic CCD cameras. Even though noise is unavoidable, it can become so small relative to the signal that it appears to be nonexistent. The danger is to have the background level higher than the signal. In that case, the DNA or the protein signal cannot be seen.

CCD technology:

CCD cameras are made of sensors that transfer every collected photon into an electron, namely into digital information. The photons are transferred into pixels. Those pixels will enable the quantification of data.

Dynamic range:

An image is made of dark & bright areas, the dynamic range will enable the detection of large intensity difference between bright and faint bands.

Excitation filter:

When you excite your sample stained with a specific fluorophore it is important to use a narrow band pass in order to get as close as possible to the excitation peak required by the fluorophore.

HAD (Hole Accumulation Diode):

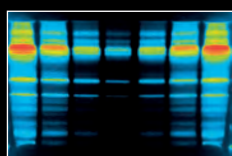
HAD is a Sony proprietary technology. The new generation of HAD technology produces excellent results in low light condition, with noise level being half that of previous levels. This new design gives dramatic improvements in light sensitivity, which makes the system perfect for the gel imaging low light conditions. Our HAD technology achieves high sensitivity and improves our camera spectral sensitivity characteristics.

Pixelization:

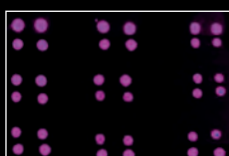
The "pixelization" occurs when there is not enough resolution on the image, it leads to an effect of clarity loss, not well defined bands and also the quantification becomes unclear as the image is hazy.

Read noise:

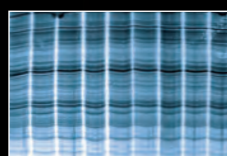
The camera read noise corresponds to the presence of parasite information that is randomly added to the details of an image. The noise is stronger in the area where the signal to noise ratio is weak. Our unique CCD technology provides a better signal to noise and more bands are detected.



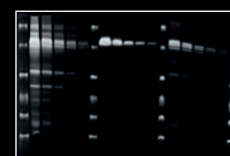
Fluorescence detection



Dot blot



Coomassie blue staining



Ethidium Bromide



TURN YOUR SEARCH INTO ANSWERS

VILBER is the leading European provider of molecular imaging systems, analysis software and UV fluorescence equipment.

Founded over 50 years ago to serve the research, VILBER has pioneered the post electrophoresis market and introduced breakthrough products such as stand alone gel-documentation, Bio-1D imaging software, Super-Bright UV technology, dedicated chemiluminescence imaging system and 3D approach to 1D gel analysis.

Through a network of owned subsidiary offices and local distributors located in over 60 countries around the world, VILBER offers a broad range of products.

For more information about VILBER, visit our website at www.vilber.com

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