

## MULTI FLUORESCENCE AND CHEMILUMINESCENCE IMAGING SYSTEM

**DETECTION WITH A DIFFERENCE**



### SYSTEM

Image resolution (megapixel)  
Effective resolution (megapixel)  
A/D  
Greyscale  
Quantum Efficiency (@ 425nm)  
Lens (motor driven)  
Motor drive Stage

Filter wheel (7-position motor)  
UV filter  
Use with external PC and printer

### LIGHTING

Epi LED White Lights  
HI-LED (UV, Blue, Green, Red)  
Visible light converter  
Blue converter screen  
Slim slide-out UV transillumination  
(20cm x 20cm)

UltraSlim Blue LED transillumination  
Gel size (cm)

### DIMENSIONS

Max image area (cm)  
Min image area (cm)  
W x H x D (cm)  
Weight (kg)  
Power Input (V)

# REAL IMAGING FOR REAL SCIENTISTS

Western blot and gel imaging remain the cornerstones of life science research. With so many ways to image chemiluminescent, fluorescent and visible dyes you need to know which gives you real results.

At Syngene, our full focus is directed at only developing imaging systems. We have been doing this for over 30 years. We have full control over all processes from being part of an organization that owns the CCD camera manufacturing company to developing hardware and writing our own software in-house. We listen to scientists and then, using our extensive understanding of the science of imaging, we deliver high performance automation that's quick and simple for everyone in the laboratory to use. See your research through our technology - your blot and gel images will never look better.

## POWERFUL

Built on the successful G:BOX range, the G:BOX mini is a compact, multi-application powerhouse for accurately imaging fluorescence and visible gels, multiplexed fluorescence westerns, stain-free gels and chemiluminescent blots. Fully integrated with single click computer controlled intuitive GeneSys software, you'll get great results every time.

## FAST

G:BOX mini features the option to use not just white LEDs but multi-color, UV, blue, green, red, far red and infra-red high intensity LEDs which are up to 200 times brighter than standard LEDs, giving you faster captures and brilliant multiplexed fluorescence images.

## ACCURATE

Combining a unique motorized stage and cooled, high resolution 6 or 9-megapixel camera means your G:BOX mini can generate true-to-life, accurate optical images, not just digitally enhanced ones. With a G:BOX mini you'll be able to distinguish between closely placed spots



“YOUR BL  
WILL NEVER

# TOP IMAGING FROM TOP TECHNOLOGY



## LUXURY LENS

Great images start with a great lens and this F/0.95 motor driven lens with data feedback and automated focus is the best. Using GeneSys software, the G:BOX mini easily controls lens aperture size, focus and zoom to get the results you want to see.



## HIGH RESOLUTION CAMERAS

Choose between a super-high 6 or 9-megapixel resolution camera. These work hard over a range of wavelengths to ensure you'll separate those close fluorescent bands and spots even on 2D gels.



## SUPER LOW COOLING

Superior Peltier cooling of the camera lets you increase exposure times to detect your faint chemiluminescence without adding annoying background noise.



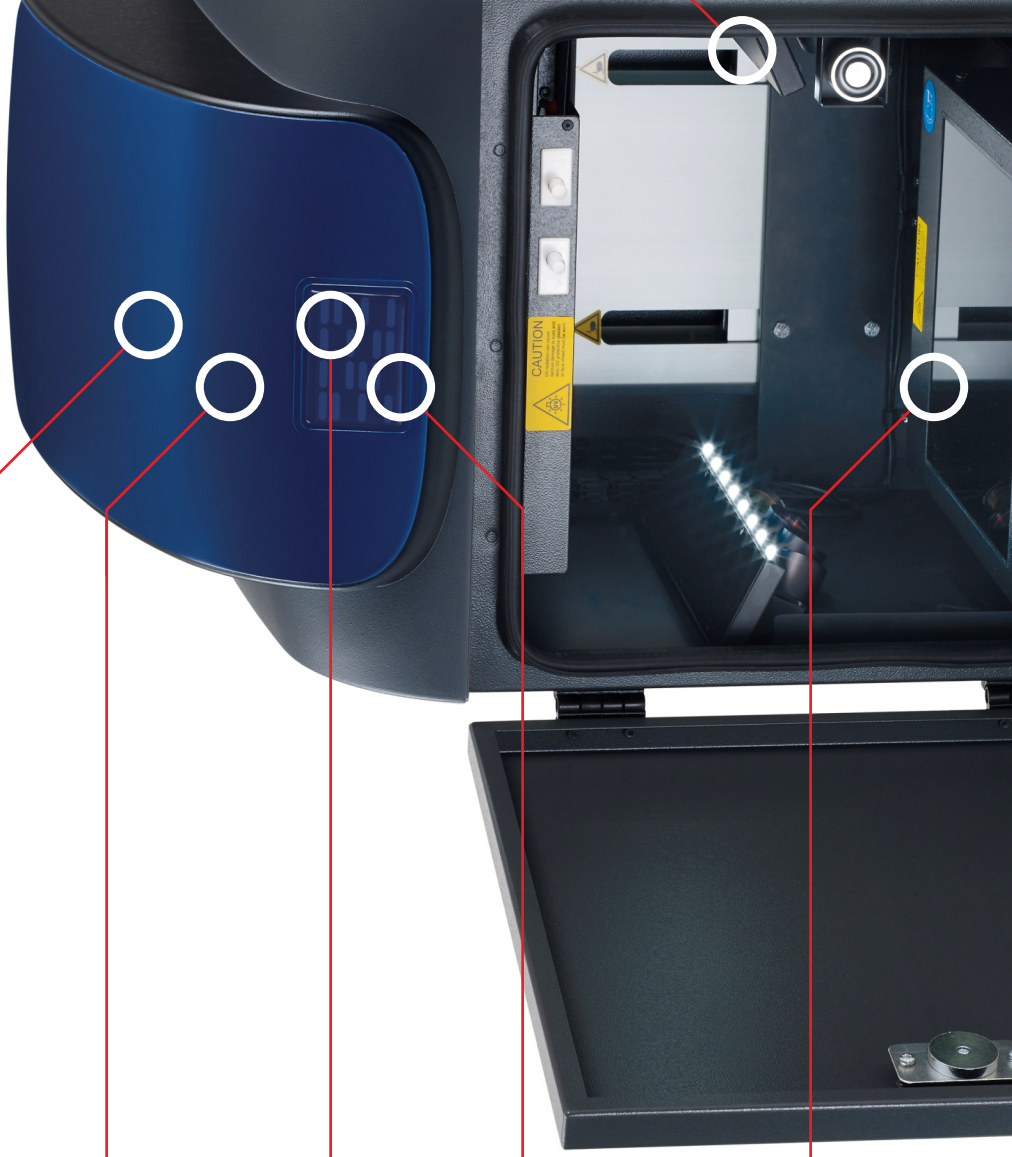
## FILTER CHOICE

A 7-position motor-driven filter wheel controlled by GeneSys software allows you to add the filter for the fluorescent stain you like to work with. Since imaging ethidium bromide and SYBR<sup>®</sup> stained DNA gels are common, we've even included a UV filter to get you started.



## REAL IMAGING STAGE

When you're working with smaller and low light emitting gels and blots, an automatic motor driven stage with automated focus is brilliant because it lets you get your samples closer to the camera, generating true-to-life



# GENESYS SOFTWARE LOAD AND GO IMAGING

The G:BOX mini is powered by GeneSys 'application driven' image capture software containing an extensive database of dyes, stain-free options and imaging protocols. For quick and easy imaging with a G:BOX mini, all you need to know is the size and type of gel or blot you're using and GeneSys automatically selects the right lighting, filters and focus for you to get the perfect image.

## CUSTOMIZABLE SETTINGS

If you prefer to choose your own settings, you can even use GeneSys in manual mode. Alternatively, if you're running several repeat applications and want to automate the image capture, you can save a protocol of sample type, dyes, lighting, filters, focus and sample size to set up one button quick image capture.

## VERSATILE MULTIPLEXING

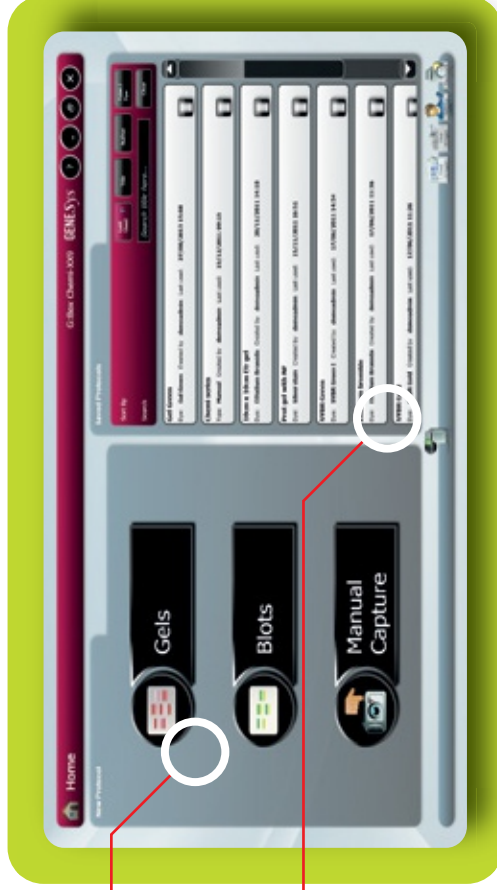
Using GeneSys in the G:Box mini you can image up to four different fluorophores per experiment and you can choose to see them as a multi-color image, as a color overlay or as single images making it easier for you to find the information you want from your gel or blot.

The G:BOX mini uses GeneTools view densitometry profiles, providing multiplexed gels and blots channels, at the same time as you can be exported directly to Excel.

Accurately quantify a multiplexed Western blot using GeneTools

Automatically detect lanes and bands and easily add molecular weight ladders with GeneTools

# “GENESYS IS A TRULY UNIQUE APPLICATION DRIVEN SOFTWARE UNEQUALLED BY OTHERS”



Select gel or blot or manual mode

Choose from any saved configurations for faster imaging

## SENSITIVE WESTERNS

When you're imaging low light chemiluminescence Western blots, you can use the GeneSys binning feature to reduce exposure times or increase sensitivity. Binning

## PICTURE PERFECT

The G:BOX mini comes with a calibrated camera which automatically eliminates hot pixels or imperfections, generating a clear background free from 'speckles' or 'spots'.

# WHAT DO YOU WANT TO IMAGE

The G:BOX mini is so versatile that the system can image any of these fluorescence, chemiluminescence and visible applications:

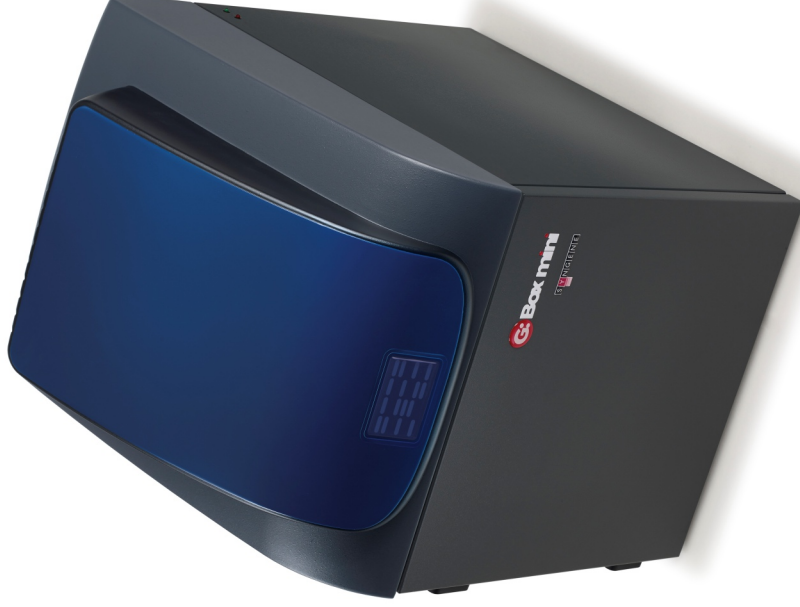
- Chemiluminescence Western blots
- X-ray films of chemiluminescent blots
- DNA or RNA stained with ethidium bromide, SYPRO or SYBR dyes on agarose gels
- Coomassie blue, Texas Red or silver stained proteins on acrylamide gels
- Stain-free gels
- Fluorescent blots stained with Qdots, Dylight, Alexa Fluor, Cy Dyes, and IR dyes
- GFPs
- Colonies or plaques on agar plates

## TIME-SAVING MULTIPLEXING

Using a G:BOX mini you can capture a broad dynamic range of fluorescence, giving you exceptional linearity and accurate quantification. The GeneSys software helps you easily detect up to four different fluorophores on the same gel or blot and automatically overlays data from each channel, while letting you view individual channels to see where bands overlap. You can normalize band intensity values to another protein or loading control so you can save time by using the same blot without having to strip and re-probe.

## ENHANCING YOUR MULTIPLEXING IMAGING CAPABILITIES

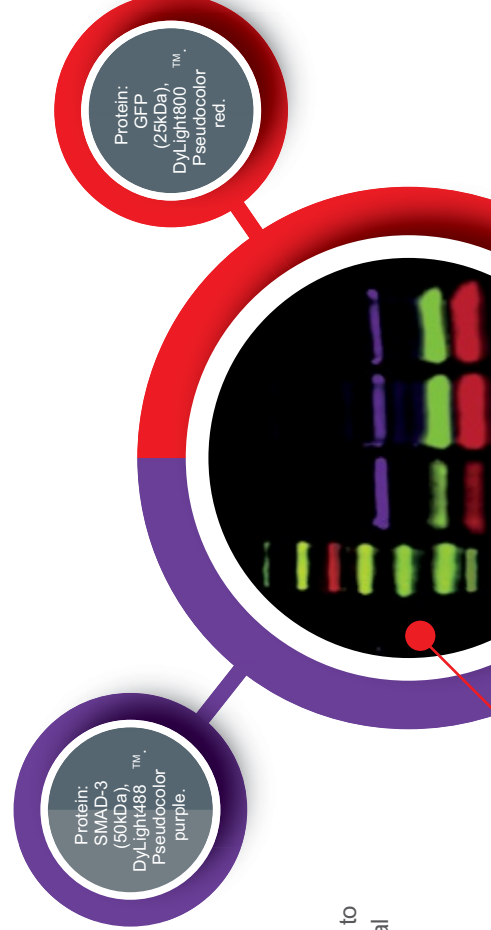
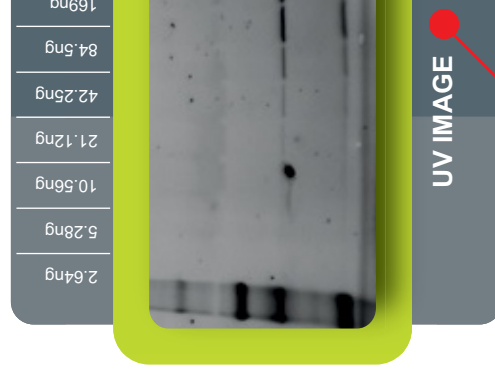
Using a combination of different fluorescent dyes in conjunction with our excitation light sources and filter combination will allow you to multiplex up to four colors, permitting you to study several proteins on the same blot.



**SMART CHEMILUMINES**  
When you're imaging chemiluminescence using GeneSys, you can set the G:BOX mini to capture images in either visible or UV light. Whether you want a quick or a high resolution image, GeneSys will get you better than X-ray film you'll get from a traditional X-ray. GeneSys captures visible protein markers and using a G:BOX mini you can set the G:BOX mini to make your molecular weight calculations.

**Figure 2 - Chemiluminescence Western Blot**  
SDS PAGE: SERVAGel TG PRIME 8%  
Blotting: Xpress PVDF Blotting-Kit  
Transferrin diluted 2-fold (5.0ng - 4.8pg)  
1st:AB a-human-Transferrin, 2nd AB a-mouse anti-human-Transferrin  
SERVALight Polaris CL HRP WB Substrate  
The image was captured on a G:BOX mini.

**SIMPLE STAIN FREE IMAGING**  
The G:BOX Chemi comes with pre-installed software that rapidly captures perfect accurate images. GeneSys software rapidly captures perfect accurate images of de-staining using dyes such as Coomassie Brilliant Blue G250.



Fisher Scientific Product code	Syngene Product Code	Description
01257163	G:BOX-MINI-6-A	6MP 16 bit camera system with motor driven fixed lens f0.95 with motor driven sample racking system. With 7 position motor driven filter wheel. Max image size 15 x 12cm. System includes EPI LED white light and wiring for optional HILED units [optional]. With Genesys software and unlimited copies of GeneTools. No transilluminator or white light converter supplied. PC required (not included)
01257164	G:BOX-MINI-6-E	6MP 16 bit camera system with motor driven fixed lens f0.95 with motor driven sample racking system. With 7 position motor driven filter wheel. Max image size 15 x 12cm. System includes EPI LED white light and wiring for optional HILED units [optional]. With Genesys software and unlimited copies of GeneTools. No transilluminator or white light converter supplied. PC required (not included)
01257165	G:BOX-MINI-9-A	9MP 16 bit camera system with motor driven fixed lens f0.95 with motor driven sample racking system. With 7 position motor driven filter wheel. Max image size 15 x 12cm. System includes EPI LED white light and wiring for optional HILED units [optional]. With Genesys software and unlimited copies of GeneTools. No transilluminator or white light converter supplied. PC required (not included)
01257166	G:BOX-MINI-9-E	9MP 16 bit camera system with motor driven fixed lens f0.95 with motor driven sample racking system. With 7 position motor driven filter wheel. Max image size 15 x 12cm. System includes EPI LED white light and wiring for optional HILED units [optional]. With Genesys software and unlimited copies of GeneTools. No transilluminator or white light converter supplied. PC required (not included)
01257237	GM-HILED-RGB	HILED Lighting option covering Red, Green and Blue
01257238	GM-HILED-RGBIR	HILED Lighting option covering Red, Green, Blue and InfraRed

Fisher Scientific Product code	Syngene Product Code
01257244	GM-HILED-UPGD-IR
01257247	GM-HILED-UPGD-LUV
01257213	FILTSP-GX-CHEMI
01257210	FILTLY800-GXM
01257209	FILTLY700-GX
01257192	FILT525-GX
01257196	FILT605-GXM
01257200	FILT705-GXM
01257218	FILTGREENX1-GX
01257235	GE-VP
01257231	GE-CONVERT5
01257234	GE-ULTRA-SLIM-LED
01257179	CONVERTBLUE-2126
01257233	GE-NFS
01257298	P95DW
01257289	K65HM
01257290	K91HG
01257236	GM-MOUNT
01257304	MINI-PC-TOUCH
01257294	SWT8