UVITEC
CAMBRIDGE

IRIS OFFERS YOU THE BEST TECHNICAL SPECIFICATIONS, MAKING IT A COMPELLING CHOICE FOR YOUR RESEARCH.

BORN FROM A PASSION TO REVEAL THE UNSEEN, IRIS IS AN INNOVATIVE INSTRUMENT FOR YOUR NEXT SCIENTIFIC EXPLORATIONS.

GAIN CONFIDENCE IN YOUR RESULTS,
PUSH THE BOUNDARIES OF YOUR PROTEIN DETECTION,

Ask for a demo

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Make It Visible

Uvitec Cambridge

UVITEC
CAMBRIDGE

IRIS

MAKE IT VISIBLE

In honor of Rosalind Franklin
and the many women in science.

“Nothing in life is to be feared, it is only to be understood."

Marie Curie (1867-1934)

ALLIANCE IRIS

I . **Innovative**

Revolutionary UV-LED Pad

R . **Reliable**

Unprecedented ChromaScan© technology

I . **Intelligent**

First A.I. based band detection concept

S . **Sensitive**

Wider lens aperture for unmatched sensitivity

In 1953, at the heart of Cambridge University, James Watson and Francis Crick discovered DNA double helix structure based on Rosalind Franklin famous “Photograph 51”.
This breakthrough not only unveiled the secrets of genetic information; it also brought certainty on the very essence of life itself.
Today, following in the footsteps of these great scientists, we embark on a journey to provide you certainty by guaranteeing quality images with IRIS.

The new Alliance IRIS is the latest generation top end imaging system on the market for chemiluminescence and spectral fluorescence Western blots. IRIS not only presents the highest optic sensitivity with an aperture of f/0.75 but also strong innovative features including our ChromaScan© and DeepEye© for unmatched precision and detection.

UVITEC was born in Cambridge and inspired by the future. With years lab experience, our product design team are very familiar with researchers daily workflows. Today, practical and user-oriented design are always at the core of our developments.

Red is the new black

The standalone design of IRIS is a testament to its practicality and user-friendliness. It is easy to clean and compact to fit seamlessly into your laboratory environment. Inspired by the red square in our logo and the distinctive shape of the DNA molecule, its design connects IRIS to the very essence of molecular research, symbolizing the pursuit of knowledge and discovery.

Get the Cambridge Touch

Enjoy the comfort of the widest touch screen. With its impressive size of over 15.6 inches (40 centimeters), our Cambridge Touch screen offers an immersive and smooth viewing experience. The screen is also adjustable, with a remarkable resolution to ensure that every detail of your molecular imaging experiment is vividly displayed.

Avoid time consuming manipulation

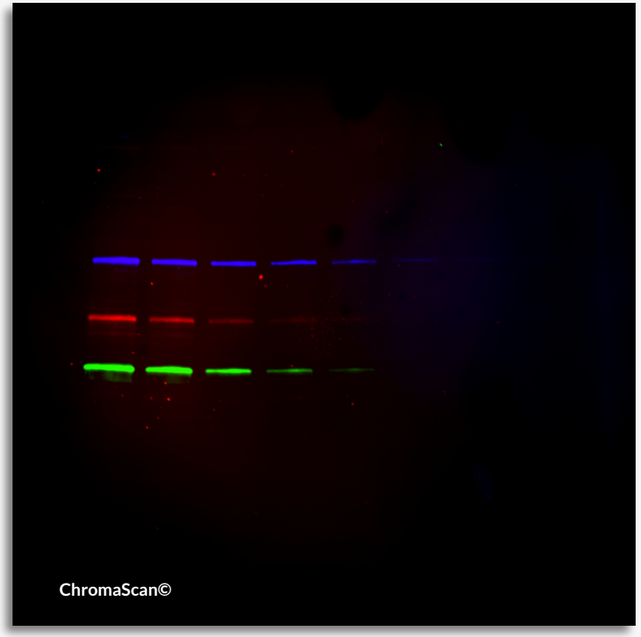
Our mobile sample tray has been designed to avoid time-consuming manipulations ensuring that you can handle your samples with ease. Additionally, our Alliance IRIS imager features a full door aperture and slide-out trays, specifically engineered to alleviate the discomfort usually associated with draw-out transilluminators.

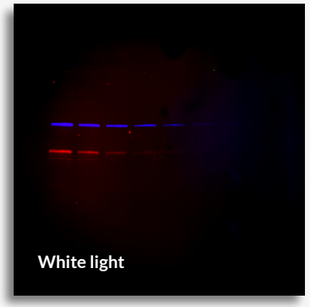
UV-LED Pad

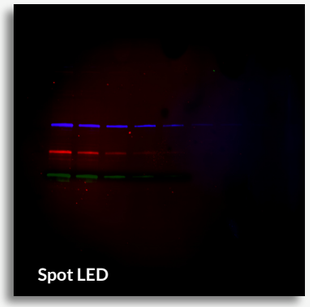
Don’t miss the next UV-LED Pad generation

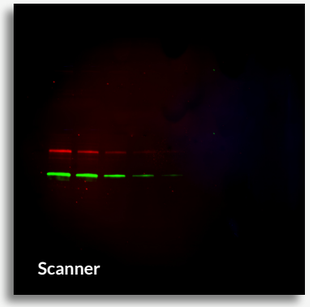
In the spirit of a sustainable environment, UVITEC Cambridge is the first to introduce a UV-LED Pad technology to ensure a smooth transition from our traditional UV-Pads. UV-LEDs have a longer lifespan: they can operate for thousands of hours without significantly losing light intensity and efficiency. In addition, these LED conditions prevent damage to your most sensitive samples.

IRIS IS INNOVATIVE









IRIS IS RELIABLE

Epifluorescence users seek consistent and uniform illumination in their applications. Our renowned Chromapure has long been addressing these requirements, and now, we take a significant step forward with the introduction of its next generation: the ChromaScan©.

A brief history of excitation light sources

Traditional imagers that you will find on the market often rely on the following illumination modes.

White light:

The very first epifluorescence imaging systems started by using white light-based technology converting white light into red, green and blue via filters. However, multiplexing is impossible because the quantity of light is divided by three.

Spot LED:

The next generation and most commonly found epifluorescence imaging systems use Spot LED technology. However, NIR/IR excitation channels originate from the same excitation source, decreasing significantly the light intensity in these channels. Depending on the manufacturer, filter quality varies, influencing crosstalk and multiplexing capacities.

Scanner:

The introduction of laser-based technology raised the interest towards near-infrared and infrared applications. However, this technology is expensive and requires long acquisition time, and is limited to 2 channels of excitation.

Find the right light source

Our well-known pulsed LED system overcomes these challenges, providing strong LED and multiplexing possibilities. The second generation Chromapure, called ChromaScan© goes beyond, offering the best of our pulsed LED concept coupled with a scanner-like technology.

Discover the power of ChromaScan©

Through its ChromaScan© technology, IRIS offers light homogeneity, more accurate quantification, and fewer crosstalk issues.

The acquisition time is rapid. IRIS leaves no room for uncertainties by guaranteeing that your samples are scanned in the same way, everywhere, by the 9 chosen light sources.

Choose a trusted companion

IRIS is made to last. In line with our top-end commitment and quality-oriented values, our system is entirely made of stainless steel and recycled components.

IRIS IS INTELLIGENT

"Artificial Intelligence (A.I.) is a transformative technology that works alongside human intelligence, enhancing our abilities, automating repetitive tasks, and enabling us to reach new heights in scientific research."

The first A.I. based molecular imager

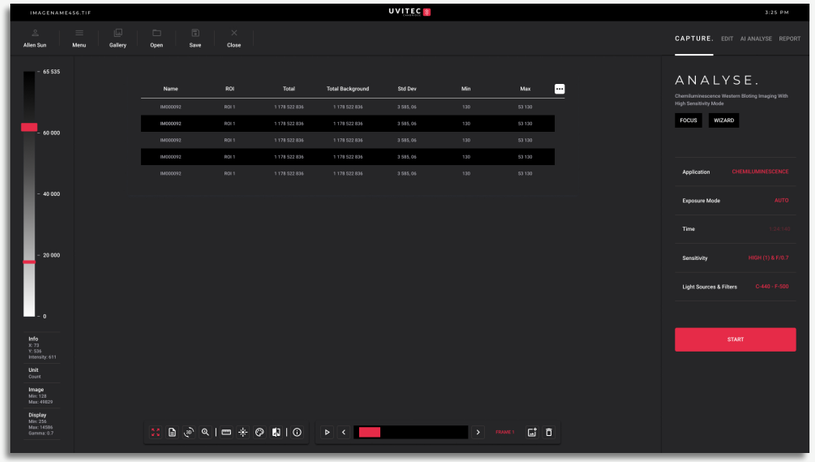
Experience effortless data analysis. IRIS integrates A.I. based technology, unprecedented in the world of molecular imaging. Through its DeepEye mode, IRIS sets up your data and automatically identifies your Western blot bands as never seen before. Skip preparation and go straight to analysis: maintain the integrity of your data.
Our system's pioneering A.I. capabilities smooths out imperfections while leaving your raw data intact.
IRIS serves as a faithful assistant, replacing routine tasks such as band and molecular weight selection.

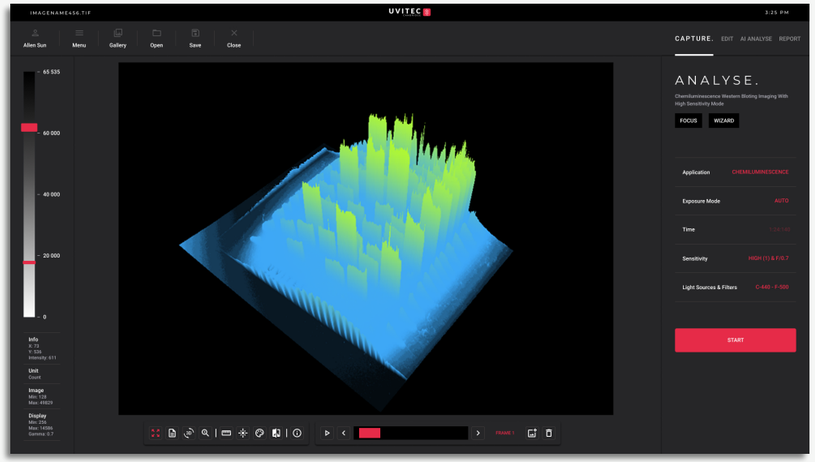
Get your images in one click

Auto is our motto. Enjoy our 1-click acquisition process with fully automatic exposure, lighting and focus mode. Our software allows you to get outstanding quantifiable images and perfect band saturation level. IRIS come with a complete license free software analysis pack (molecular weight, protein quantification or distance calculations) that you can install on as many computers as necessary.

Upgrade your system at anytime

IRIS is fully customizable, tailored to your workflow, and upgradable through plug and play technology. Equip your IRIS with up to 7 excitation lights for epifluorescence Western blots by clipping at any time the pulsed LED of your choice.





IRIS IS SENSITIVE

Just as the human iris opens a window to the world, our IRIS imager opens a portal to a molecular universe where your protein of interest is revealed in unprecedented detail. Combining all the parameters presented below, IRIS guarantees sensitivity.

Collect more light

IRIS has its eyes wide open: its lens features an impressive f/0.75 aperture, which allows it to capture an incredible amount of light. As you may know, in optics, the smaller the focal number, the more light your device collects.

Get the best quantifiable pictures

IRIS is equipped with a state-of-the-art camera that incorporates a remarkable 9.2-megapixel resolution. This high resolution ensures that you can discern even the finest details in your imaging experiments. In addition, our system provides pictures with high density of grayscale within the camera, enabling you to precisely analyze your samples. The closer you get to 65,535 grey levels, the more quantifiable information you have access to.

Detect even the weakest signals

IRIS' optical system is further enhanced by its exceptional dynamic range, with an optical density (OD) of 4.8. This means that IRIS can capture a wide range of signal intensities without losing crucial information. Whether you are working with faint signals or intense ones, IRIS can accommodate your needs with ease.

Keep it cool

To maintain its sensitivity, IRIS relies on a sophisticated cooling system, using a three-stage Peltier normalized camera. This cooling system ensures an impressive -30°C absolute cooling, minimizing background noise and detecting your lowest signals.

Practicality

1-click to image > effortless acquisition, in no time

No manual control > hands-off, automated routines

Slide Out tray > hassle-free sample positioning

All-in-one > acquisition – editing – analysis, straight away

DeepEye© concept > revolutionized analysis

Applications

Femtogram-level > stunning detection of faintest signals

Uvipure© technology > enhanced UV for EtBr and all safe stains

ChromaScan© concept > homogeneous excitation light

Confocal discs > boosted detection of fluorescent signals

Multiplexing > up to 7 excitation simultaneous channels

Optics

9.2 megapixels > massive resolution, HD pictures

f/0.75 custom lens > unrivalled camera sensitivity

3 stage Peltier Cooling > absolute -30°C

OD 4.8 dynamic range > outstanding weak/strong detection ratio

65,535 gray levels > research level protein quantification

Darkroom

Touch screen design > Q-Smart darkroom

Innovative UV > LED 312nm - UV tubes available

Plug-n-play > upgrade any module, at any time

Motorized 9 position filter wheel > numerous narrow emission filters

All in one > stand alone touch screen 15.7 inch and integrated PC

Dims > Height: 686 mm - Width: 406 mm - Depth 499 mm - **Weight** > 63 Kg - **FOV** > 21 x 26 cm

Chemiluminescence	Western blotting
Fluorescence	DNA and RNA gels with fluorescent stains
Epi Fluorescence	Optional selection of NIR / RGB excitation source from 9 available
Bioluminescence	In-vivo Luciferase and Fluorescence
Visible Imaging	Optional Colorimetry and Protein gels

THEY TRUST US

More than 10.000 users worldwide

UNIVERSITY OF CAMBRIDGE

UNIVERSITY OF OXFORD

Institut Pasteur

UNIVERSITY OF CALIFORNIA

THE UNIVERSITY OF MELBOURNE

SAREPTA THERAPEUTICS