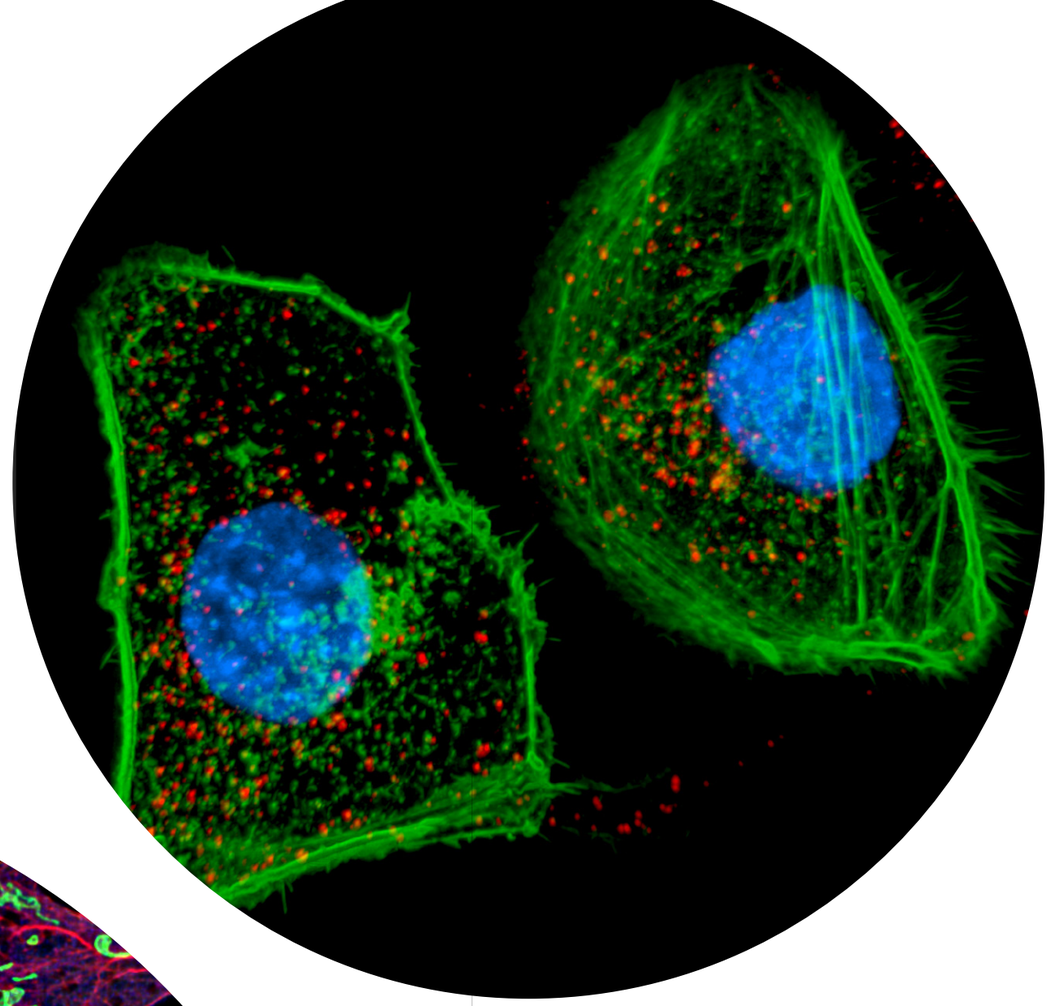
Clarity

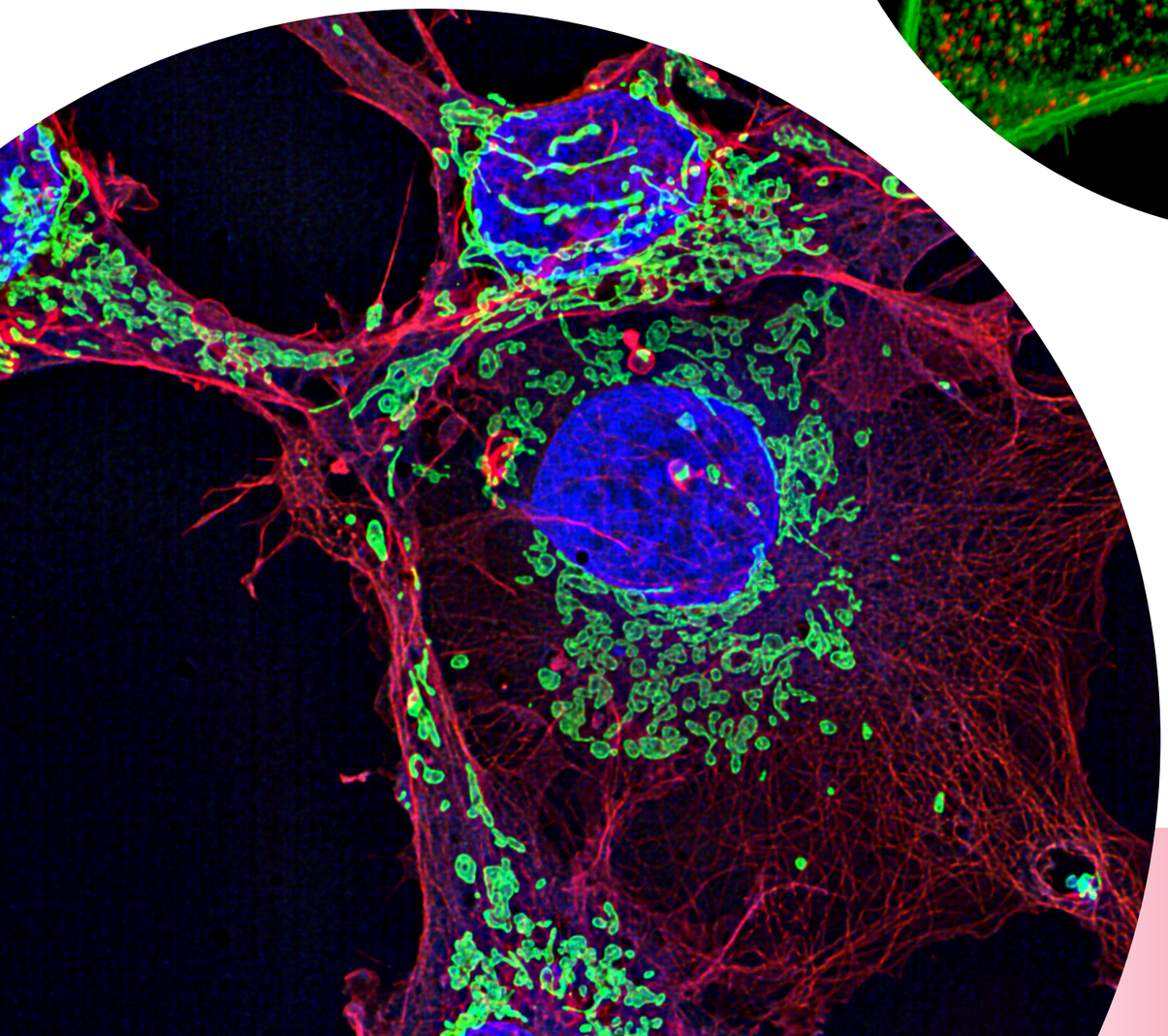
The **Affordable** Confocal Upgrade

AUROX

Discover **Clarity**

Introducing **Clarity**, **the compact and affordable way** to laser-free confocal imaging using your **existing fluorescence microscope** and choice of camera and light source





Clarity packs more than **20 years** of Aurox confocal microscopy experience into the **world's most compact, high performance confocal imaging system**

Higher Resolution

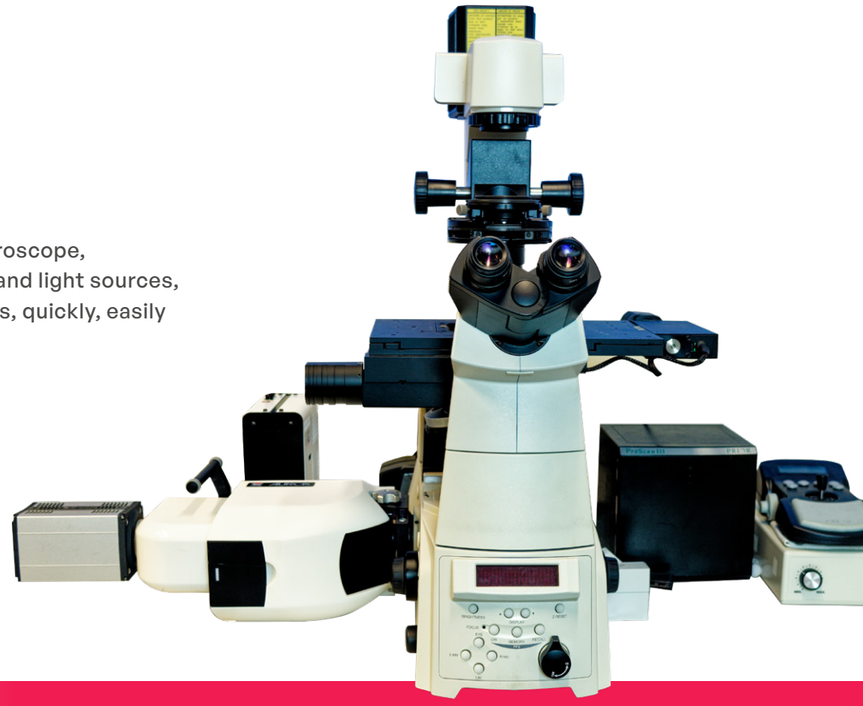
Clarity uses Aurox's patented, light efficient, structured illumination spinning disc technology to achieve high resolution, high quality confocal images at high speed

Happier Samples

By using structured illumination the light budget is improved, photo bleaching is reduced and phototoxicity minimised keeping your samples happier for longer

Highly Compatible

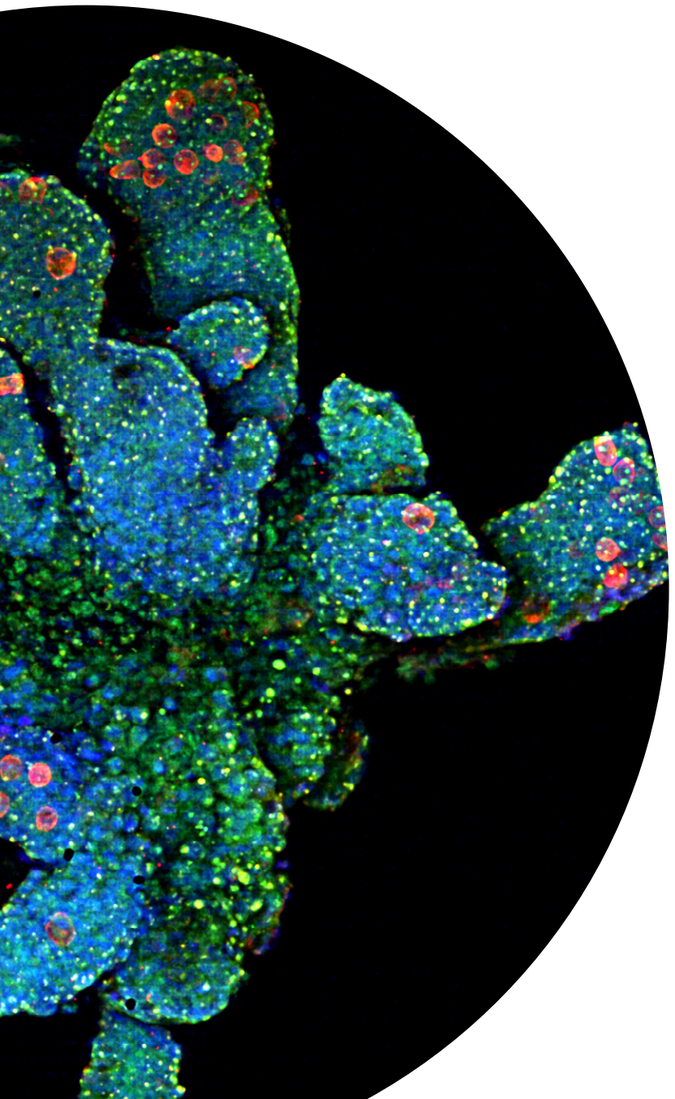
Designed to fit virtually any microscope, compatible with most cameras and light sources, Clarity achieves confocal images, quickly, easily and affordably

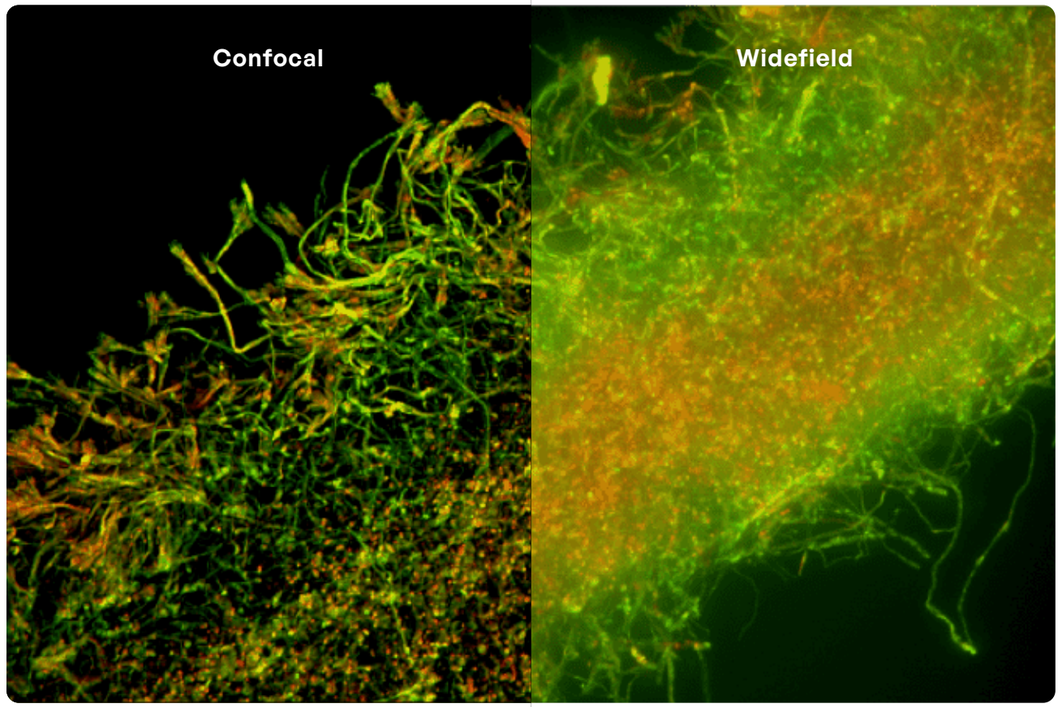


Start your journey with us **today**

Apply **Clarity**

Clarity's combination of extended spectral range (370-750nm) allows for the use a wide range of **fluorescent markers, dyes and fluorescent proteins**





Confocal vs Widefield image comparison.

Applications

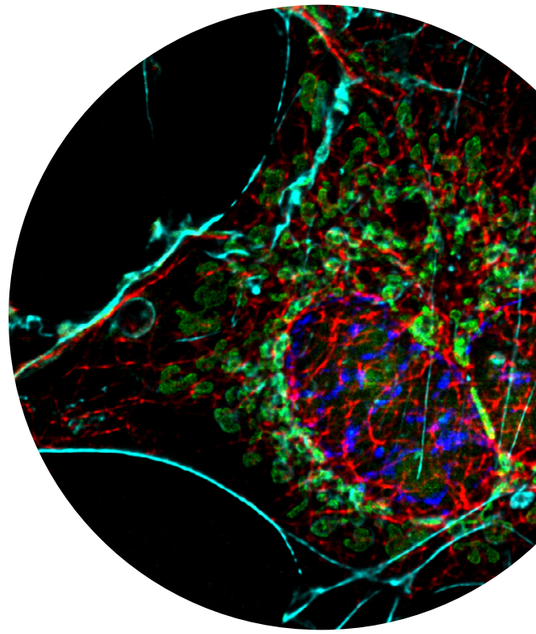
High speed imaging with low photo-bleaching and low photo-toxicity makes its use ideal for a wide range of applications where high levels of detailed three-dimensional data are required from your fluorescent samples

- **Immunology**
- **Developmental Biology**
- **Neuroscience**
- **Embryology**
- **Plant Biology**
- **Cell Biology**
- **Molecular genetics**

Three Levels Of Optical Sectioning

Three levels of optical sectioning are available on a single disk allowing you to choose between high axial resolution or increased signal. No exchange of Disk is required and all controlled through software. Benefit from increased speed through Z, increased signal if your fluorescence is weak, and balance speed/signal for live cell imaging

Confocal and wide field images can be obtained simultaneously without mechanical switching

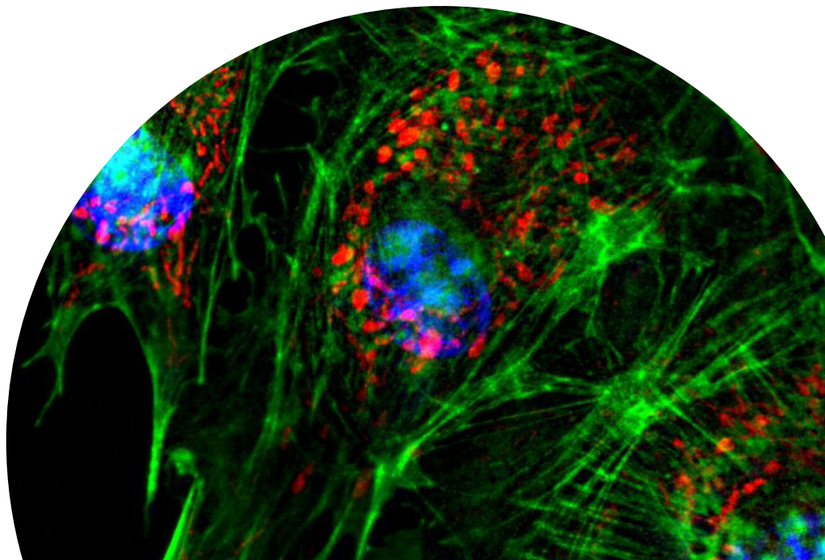


High Speed

The patented structured illumination spinning disk technology allows Clarity to acquire high resolution confocal images at up to 100 frames per second, ideal for live cell studies, multiple sample imaging and large Z series tile scans

Flexible System

The flexibility of the system allows for integration into Micro-fluidic systems and is an easy-to-use platform for Drug Discovery using multi well formats



Explore **Clarity**

‘C’ Mount Port

Camera “c” mount port can be directly coupled to a variety of large field of view (2kx2k) sCMOS and CCD cameras from a host of major manufacturers

More Light Transmission

Light sources can be coupled directly or via a light guide. The grid pattern used on the spinning disk allows up to 50% more light transmission than traditional (Nipkov) disk designs and is free from laser safety restrictions

Optical Disc Arrangement

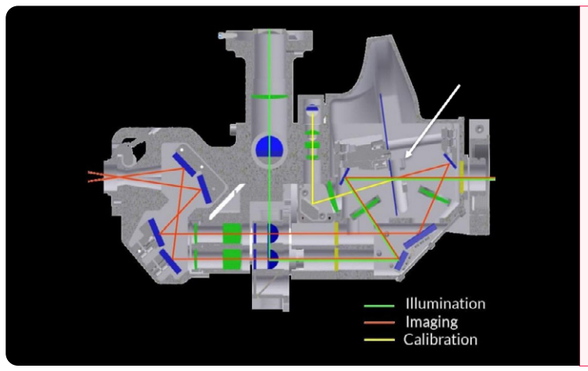
Unique optical disc arrangement allows the separation of transmitted (in focus) and reflected (out of focus) light to generate a confocal image

Clarity

Scan head available in Standard and HS versions. The standard Clarity can run up to 50 frames/sec while Clarity HS provides up to 100 frames/sec full frame video capture

Multiple Connections

Connection to inverted, upright and macroscopes from all major makers A range of coupling adaptors is available for old or new microscopes



4-Position Filter Cube

Incorporates an internal 4-position filter cube turret, quick and easy to replace filter cubes, user exchangeable without the need for tools.
A wide range of filter cubes is available as well as custom filters sets

Software Controlled

All controlled in Windows with Visionary software on your PC

Laser Free Confocal

Laser free confocal not an expensive laser-based illumination. – lower priced, longer life, LED or metal halide based light sources, save on maintenance costs, maximise up-time, and no laser safety issues

Control
Clarity

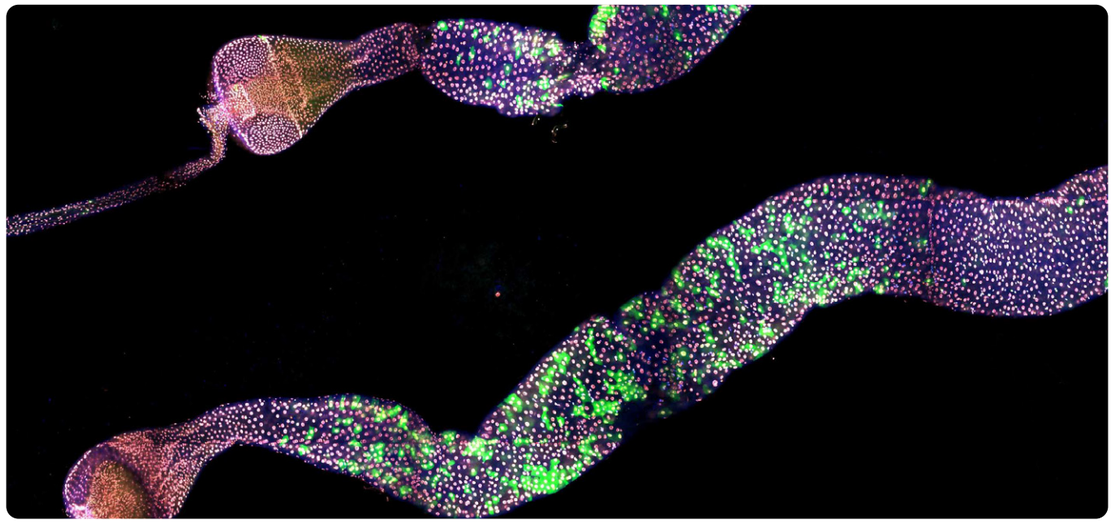
Clarity is controlled by **Aurox Visionary software** - image acquisition is fast and software straight forward to use. Visionary presents all experiment set-up modes and device control in **one colour coded work-flow**

Simple Set-Up

Easy and straightforward system configuration for the scan head and all supported external devices including camera, filters, light source, Z drive, and motorised stage. A graphical map of the hardware is displayed together with drop-down menus for each device for easy system set-up

Follow The Flow

From top to bottom configure, define your settings and then run. Visionary provides you with all the functionality you need for successful experiments



Custom Configuration

Select from combinations of: Sectioning modes for optimised resolution or speed, Z-stack, Multi-channel, Time-lapse, Mosaic tiling, Multi-position

Export Your Files

Transfer your data for further review or post processing with one click export to data rich OME-TIFF file format. Post process in a variety of software or freeware. Runs on Windows platforms

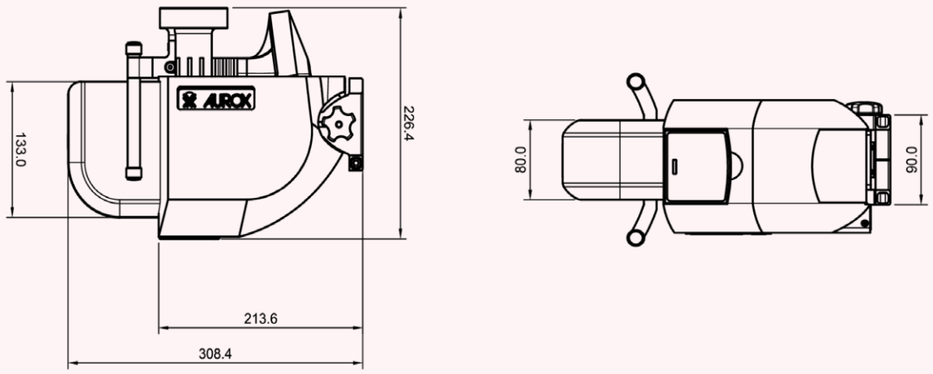
Connect
Clarity

The height of **versatility and adaptability,** Clarity is **extremely compact** having dimensions 308x226x135mm (WDH) and weighing 6Kg.
It can be mounted **on upright and inverted microscopes, left or right ports and even on a macroscope**

Clarity Key Specifications

Confocality	0.6 micron (FWHM) with 1.4 NA oil objective
Minimum Exposure	20 msec (10 msec for Clarity HS)
Frame Rate	Up to 50 fps (Up to 100 fps for Clarity HS)
Imaging Channels	4 with user exchangeable filter cubes
Channel Switching	<200 msec
Excitation Range	370 – 700 nm
Emission Range	410 – 750 nm
Optical Sectioning	3 switchable options plus widefield confocal widefield switching
Confocal Widefield Switching	By software, simultaneous confocal and brightfield modes
Illumination	LED/metal halide
Detectors	Wide range of C-mount cameras (2kx2k)
Microscope Mounting	Upright, inverted and macroscope adaptors available
Software	Visionary running in windows 10/11
Image Files	OME-TIFF with companion file
Dimensions	308x226x135mm (WDH)
Weight	< 6 Kg

Clarity Dimensions



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