

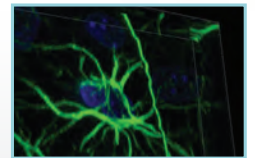
Whole-slide confocal microscopy and 3D histology



Pannoramic MIDI Confocal

Fully automated, whole-slide scanning with high light efficiency, minimal bleaching and very fast scanning speeds. This revolutionary system offers brightfield, confocal and widefield fluorescent imaging in a single instrument.

- Easy scanning for high productivity: automatic sample localization, automatic exposure, multislide mode
- Unique technologies for increased speed: darkfield and fluorescent preview – effectively skipping empty areas, a Lumencor LED light engine for excellent illumination, Scientific sCMOS camera – high sensitivity with low noise for short exposure times, fully automatic water immersion system for high NA objective
- Anti-bleaching solutions: structured illumination for collecting every usable light from the sample, high brightness confocal mode for weak signals, hardware light triggering to avoid unnecessary sample illumination, reducible light intensity for sensitive samples
- Advanced options: customizable area selection, adjustable scanning and image processing options.



3DView

3DView's 3D reconstruction of fluorescent images gives an amazing view of the whole specimen.

Microscope slides allow you to see only one section of reality. Even with Z-stack or Extended focus, you are still constrained to a single section.

3DHISTECH offers you a tool that can reconstruct the original tissue from its serial sections. Unlike an MRI, the 3DView software lets you look into microscopic details while also showing you the tissue in its original form.

	Technical specifications		
	Laser scanning confocal	Spinning disc	Aperture correlation Pannoramic Confocal
Scan speed	Slow, typically 2-3 FOV per second with 1024 x 1024 resolution	Highly limited light intensity, noisy images	1 x 1 mm area, four minutes with 40x objective
Bleaching and phototoxicity	High	Medium	Low
Light source	Lasers, 100-200 mW	Lasers, 100-200 mW	LED, 200-1000 mW
Light efficiency	<ul style="list-style-type: none"> • 100% illumination • 1-4% emission • 1-4% overall efficiency 	<ul style="list-style-type: none"> • 70% illumination • 3-4% emission • 2-3% overall efficiency 	<ul style="list-style-type: none"> • 50% illumination • Nearly 100% emission • 50% overall efficiency
Confocality	Continuously adjustable, unlimited tissue thickness	Fixed pinhole size, limited tissue thickness	Adjustable in three steps, unlimited tissue thickness
Running costs	Expensive lasers with 1000-2000 hour lifespan	Expensive lasers with 1000-2000 hour lifespan	Low cost LED lifespan is over 15,000 hours