

The only laser ablation system designed for maximum performance in bio-imaging

Features

Bio-specific laser source

Sub-micron ablation
High resolution viewing
XYR device standard

Elemental Scientific

LASERS

INNOVATION TO ILLUMINATE

Easier to set parameters to analyze the tissue, not the microscope slide

Sub-micron mode for single cell imaging

20X objective for viewing and placing scans at the sub-cellular level

Rectangular craters match sampling to the output pixel shape

NWRimage Specification Summary

Performance Specifications

Laser	Polaris 300 – 266nm
Beam profile	Flat
Repetition Rate	1-100Hz
Fluence	>2 J/cm² at the sample surface.
Spot Sizes	Aperture Imaged: 65 circular spots 1-65µm XYR device standard for 1µm increment rectangular spots
Ablation chambers	High performance two volume ablation chamber – TwoVol2
XY Stage	100mm x 100mm, 1µm resolution
Mass flow controllers	Standard: 0 – 1 L/min He MFC
Triggering	Bi-directional hard triggering Software plug-ins with ICP-MS systems for greater control and automation
Primary viewing system	Full HD 1080p digital camera with 15x to 60x objective-to-camera magnification
Secondary viewing system	25mm field of view for macro navigation
Lighting	3 high-intensity, LED light sources (coaxial, ring and transmitted) Fully software controlled
Polarizer	Software-controlled rotating cross polarizer
Software	Class leading ActiveView2 software

General Specifications

Safety Classification	Fully interlocked Class 1 system
Warranty	12 months
Dimensions	89cm x 79cm x 150cm (35" x 31" x 59") DxWxH
Weight	270kg (600lb)
Cooling	Air cooled
Platform	Ultra-stable bridge design on Ultra Compact cart





Site Requirements

Temperature	21°C ±3°C (70°F ±10°F)
Relative Humidity	20% - 65% non-condensing
Power Requirements	100-110V (AC), 6A, 50/60Hz 220-240V (AC), 3A, 50/60Hz

Additional Options

	CryoCell	Liquid N ₂ cryocell – operates down to -100°C
	Mass flow controllers	Optional: 0 – 100 mL/min N_2 MFC Optional: 0 – 1 L/min Ar MFC
	DCI	Dual concentric injector – ultra-fast washout for single-shot and imaging analysis
	Bloodhound	Performance upgrade for TwoVol2 ablation chamber for ultra-fast analysis
	Slide Cell1	Ultrafast performance in a ablation chamber designed specifically for samples on biological slides.
	Warranty extension and service contract	Available on request



