



NWRfemto  
FEMTOSECOND  
LASER ABLATION FOR  
THE ULTIMATE IN  
FRACTIONATION CONTROL

## Features

High performance fs laser  
Rugged design  
Infinitely Variable Aperture (IVA)  
ActiveView2 Software

Reduce thermal effects to achieve stoichiometric analysis and the most precise analytical data

Light Conversion Pharos

Optimum stability and mobility

Greater flexibility – spot selection in 1µm increments

Intuitive, feature rich laser ablation control software – designed around your workflows with improved ICP-MS compatibility

Multi-layered viewing for greater sample control in less time

# NWRfemto

## Specifications summary



### Performance Specifications

Laser	Light Conversion - Pharos
Beam profile	Gaussian
Repetition Rate	1-1100Hz with 1Hz resolution
Laser Attenuation	High resolution diode control
Fluence	>3 J/cm <sup>2</sup> at the sample surface (257nm)
Spot Sizes	Aperture Imaged: 65 circular spots 1-65µm
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	Closed loop water cooled
Platform	Ultra-stable bridge design on Ultra Compact cart



### Site Requirements

Temperature	22°C ±2°C (68°F ±3°F)
Relative Humidity	<60% non-condensing
Power Requirements	100-110V (AC), 6A, 50/60Hz 220-240V (AC), 3A, 50/60Hz

### Additional Options

Alternative wavelengths	208nm, 257nm or 1028nm
Dual wavelength	Software-controlled wavelength switching between 257nm and 1028nm
CryoCell	Liquid N <sub>2</sub> cryocell – operates down to -100°C
Mass flow controllers	Optional: 0 – 100 mL/min N <sub>2</sub> MFC Optional: 0 – 1 L/min Ar MFC
DCI	Dual concentric injector – ultra-fast washout for single-shot and imaging analysis
Warranty extension and service contract	Available on request

