Specifications

Configuration	**INTERFIRE *II* 3.39**
Description	MWIR Twyman-Green unequal path interferometer
Acquisition Mode	Temporal phase shifting
Alignment Mode	Visible alignment laser
Wavelength	3.39µm
Maximum Output	Test lasers: <4mW Alignment laser: < 45mW at 633nm
Maximum Cavity Length	> 30 m
Beam Diameter	30.0mm collimated
Polarization	Linear
Pupil Focus Range	800mm
Pupil Magnification	1x to 4x
Camera	High resolution 320 x 240 uncooled ferroelectric focal plane array
Motorized Controls	Zoom, Focus, Tip-Tilt Reference Mirror
Computer System	Minimum Dual Core 2 GHz processor, 1 GB RAM, 160 GB hard drive CDRW, DVDRW, 19in LCD monitor, keyboard, mouse, frame grabber
Operating System	Windows XP®
System Software	µShape™ and FastFringe™ from FISBA OPTIK µShape™ Phase Shifting data acquisition FastFringe™ instantaneous data acquisition Fringe contrast controlled via camera and frame grabber settings Reference generation, subtraction, data averaging, masking 2D and 3D surface maps Zernike / Seidel / Slope / Geometric / Fourier Analysis Absolute sphere, aspheric analysis, prism & corner cube analysis, multiple aperture analysis
Physical Envelope	Base Unit L67.7 x W26.0 x H28.0cm External MWIR laser L110.0 x W16.0 x H13.0cm
Weight	Base Unit 30kg MWIR Laser 20kg
Power consumption	720Watts
Temperature Range	Operational: 10–30°C, stability +/-2°C, non-condensing Storage: 5–45°C, non-condensing
Warranty	One Year, limited, on-site system installation and operator training
Options	
Beam Expanders	Range of beam expanders available on request from x3 to x10 magnifaction
Transmission Spheres	Range of transmission spheres available on request from f#0.65 and f#8.0
System Software	Add-on Modules to µShape™ including homogeneity of optical materials, cylinders, torics, & fiber connector analysis
System Performance	
Acquisition Rate	µShape™ 0.16secs to 1.33secs FastFringe™ 20millisecs
Sample Reflectivity	15 to 100%
PV Accuracy	µShape™ with active calibration: wave aberration <λ/50 (typically λ/100); surface deviation <λ/100 (typically λ/200) FastFringe™ wave aberration <λ/20 (typical λ/TBA); surface deviation <λ/40 (typical λ/TBA)
RMS Repeatability	µShape™ with active calibration: wave aberration <λ/100 (typically λ/500) FastFringe™ wave aberration <λ/50 (typical λ/TBA)

All specifications subject to change without notice

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