

Model				Basic model C3	Standard model L3	High-end model L7
Function				White light confocal	White light confocal	White light confocal
					Laser confocal	Laser confocal
						Differential interference contrast observation
						Optical interference measurement
					Spectroscopic reflectometry film thickness measurement	
Light source	Xenon / LED			✓		
	Laser			-	405nm	
FOV / Magnification	Light source	Objective lens	24-inch screen magnification	FOV (HxV)		
				1x	18.5x	15,000 × 15,000 μm
		2.5x	46.2x	6,000 × 6,000 μm		
		5x	92.5x	3,000 × 3,000 μm		
	White light	10x	185x	1,500 × 1,500 μm		
		20x	370x	750 × 750 μm		
		50x	925x	300 × 300 μm		
		100x	1,850x	150 × 150 μm		
		150x	2,775x	100 × 100 μm		
		Laser	50x	1,850x	-	150 × 150 μm
100x	3,700x		-	75 × 75 μm		
150x	5,550x		-	50 × 50 μm		
Zooming				1x~8x		
Frame memory			Brightness	1,024×1,024×12 bit / High definition mode 2,048×2,048×12 bit		
			Height	1,024×1,024×16 bit / High definition mode 2,048×2,048×16 bit		
Frame rate				15 Hz~120 Hz		
Width measurement	Minimum unit of measurement			0.001 μm		
	Accuracy			± [ 0.02 × (100/Objective lens magnification)+L /1000 ] μm		
	Repeatability(3σ) <sup>1</sup>			10 nm		
Height measurement	Scale resolution			0.05 nm		
	Accuracy			±(0.11 + L/100) μm		
	Repeatability(σ) <sup>2</sup>			10 nm		
	Measurement range <sup>3</sup>			7 mm		
Z stroke				100 mm	80 mm	
Nosepiece				5-hole motorized revolving nosepiece (with auto lens position recognition)		
XY stage	Manual			✓	-	
	Motorized			Options	✓	
Differential interference contrast observation				Options	✓	
Vertically-scanned white light interferometer				Options	✓	
Phase shift interferometer				Options		
Spectroscopic reflectometer measurement				Options	✓	
Software	Image capture			HDR mode, Patchwork, multi-gain, etc.		
	Image processing			Surface shape correction (tilt, spherical), noise elimination, filter, color extraction, binarization, etc.		
	Profile analysis			Profile measurement, comparison measurement, surface roughness measurement, width and pitch measurement, film thickness measurement		
	Data output			Dedicated extension, general use image file, CSV file, STEP file		
	Efficiency tool			M Carte, filter assist, macro function, surface roughness suggest, Office report		
Utility				AC:100 V 50/60 Hz approx.800 VA		
Dimensions and weight	Microscope unit			382(W) × 511(D) × 689(H) mm approx. 40 kg		
	Control unit			430(W) × 450(D) × 100(H) mm approx. 7 kg		
	Light source unit			142(W) × 279(D) × 210(H) mm approx.3.8 kg		
	Lamp house			142(W) × 311(D) × 227(H) mm approx.6.7 kg		
	PC			175(W) × 440(D) × 360(H) mm approx. 9 kg		
	Monitor			556(W) × 180(D) × 513(H) mm approx. 4 kg		
Traceability				✓		

\*1 Based on reference pattern measurement using 100x (NA0.95) under no vibration condition.

\*2 Based on the measurement of VLSI Standards' step height standards using 100x (NA0.95) under no vibration condition.

\*3 Up to the maximum distance of objective lens movement