



MicroLine™ AF Plus

VIEW MicroLine AF Plus high performance critical dimension optical measurement systems are designed to measure wafers, masks, MEMS, and other micro-fabricated parts. These capable desktop instruments provide precise automated optical measurement for features as small as 0.5 μm on parts up to 300 x 300 mm.

- Motorized XYZ table with manual mode override
- Microscope optics with 5-position objective lens turret with DIC slot
- Transmitted and reflected light sources with programmable source and intensity control

MicroLine AF Plus Travel (mm)				
Models		X	Y	Z
	1000	100	100	175
	2000	200	200	175
	3000	300	300	145

Automated Critical Dimension Metrology System



VIEW MicroLine 2000 AF Plus shown

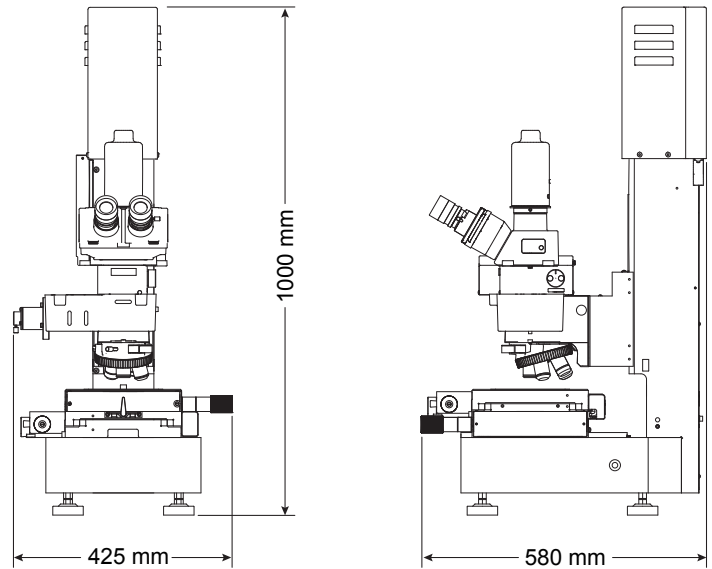
Metrology Software

- VIEW Metrology Software (VMS™)

Optional Software Modules

- Area Multi-focus (AMF™)
- Extended Depth of Field Image (EDFI)
- Advanced Image Processing
- COM and Custom UI
- MeasureFit® Plus
- OGP® EVOLVE® SmartProfile®
- OGP EVOLVE SPC
- VMS Offline Image Processing Workstation

MicroLine™ AF Plus



MicroLine 1000 AF Plus shown

	MicroLine 1000 AF Plus	MicroLine 2000 AF Plus	MicroLine 3000 AF Plus
XYZ Travel	100 x 100 x 175 mm	200 x 200 x 175 mm	300 x 300 x 145 mm
Max Recommended Load	6 kg	10 kg	15 kg
Machine Weight	System Weight: 130 kg Shipping Weight: 210 kg	System Weight: 190 kg Shipping Weight: 310 kg	System Weight: 315 kg Shipping Weight: 470 kg

	Standard	Optional
XYZ Scale Resolution	0.1 µm	
Stage Drive System	DC Servo Motor, X,Y,Z equipped with manual override	
Imaging Optics	Microscope optical system with manual 5-position objective lens turret, bright field / dark field imaging and trinocular viewing system with optical crosshair	Analyzer, Polarizer, and DIC
Illumination	Green LED coaxial surface light and LED transmitted substage light, programmable for source and intensity	White LED coaxial surface light and color filters
Metrology Camera	2.0 megapixel (1628 x 1236), digital, monochrome metrology camera	Color and other high-resolution camera configurations are optionally available
Back Tube	0.63X back tube	Other options available by request
Front Objective Lens (field interchangeable)	10X bright field / dark field 50X bright field / dark field	2.5X bright field 5X long working distance, bright field / dark field 20X long working distance, bright field / dark field 100X long working distance, bright field / dark field 150X bright field / dark field
Metrology Software	VIEW Metrology Software (VMS)	VMS Offline Workstation Software
System Controller	Intel® processor based Microsoft® Windows® operating system and on-board networking and communication ports	
Controller Accessory Package	QVI® multifunction handheld controller with 3 axis joystick and illumination controls	Single LCD flat panel display, computer keyboard and mouse Dual LCD flat panel displays, computer keyboard and mouse
Power Requirements	100-120 VAC or 200-240 VAC, 50/60 Hz, 1 phase, 250 W	
Safe Operating Environment	15-30 °C, non-condensing	
Rated Environment	Temperature 18-22 °C, stable to ±1 °C, max rate of change 1 °C / hour, max vertical gradient of 1 °C / meter; 30-80% humidity; vibration <0.001 g below 15 Hz	
FOV Accuracy	0.070 µm traceable to NIST (requires 50X or higher objective lens)	
FOV Repeatability	0.010 µm (1σ) on wafers (requires 100X or higher objective lens)	
XY Area Accuracy	E _z : (3.0 + 5L/1000) µm	
Z Linear Accuracy	E _x : (3.5 + 4L/1000) µm	

Accuracy is evaluated with a QVI verification procedure where "L" is measured length in millimeters. Specifications apply within the rated environment. The XY and Z accuracy specifications are applicable when configured with a 10X or higher front objective lens. XY Accuracy applies with an evenly distributed load up to 5 kg in the standard measuring plane. The standard measuring plane is defined as a plane that is within 25 mm of the worktable surface. Depending on load distribution, accuracy at maximum payload may be less than standard.



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