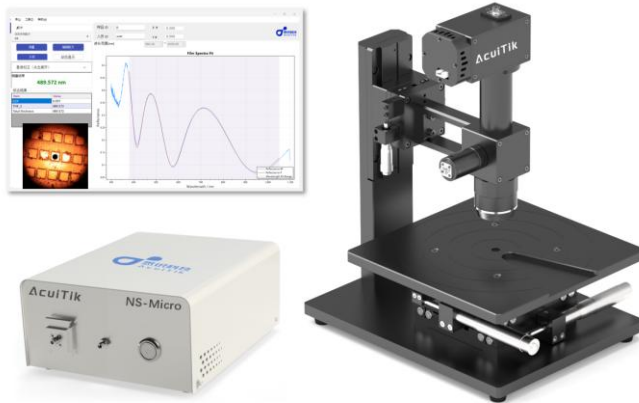




Film Thickness Measurement System **NanoSense** NS-Micro series (Microscope-integrated)



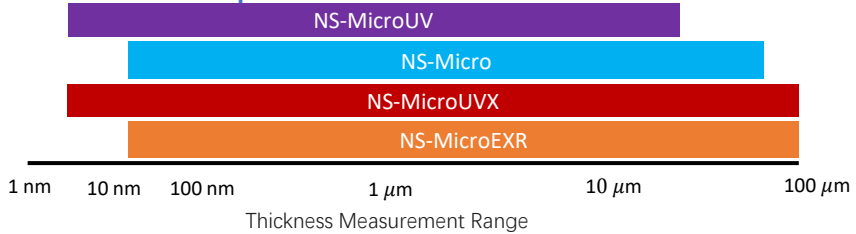
The NS-Micro Series is a microscope-integrated thin-film measurement and analysis system. Constructed by superimposing a spectroscopic measurement module onto a microscope platform, it enables precise focusing of the measurement spot down to a 1 μm region, while simultaneously displaying real-time color imagery of the measurement site. The NS-Micro Series is ideally suited for thin-film characterization in micro-areas and laboratory R&D applications.

NS-Micro Features

- Superior measurement signal intensity ensures reliable film thickness metrology even in micro-areas.
- High-precision manual translation stage allows for accurate positioning and measurement of minute sample regions.
- Integrated color camera enables real-time monitoring of the specific measurement spot.
- Selectable measurement spot size ranging from 1 to 500 μm .



NS-Micro Series Specifications



Model Type	NS-MicroUV	NS-Micro	NS-MicroUVX	NS-MicroEXR
Wavelength Range	190 – 1000 nm	380 – 1100 nm	190 – 1700 nm	380 – 1700 nm
5X Thickness Measurement Range ¹	-	15 nm – 75 μm	-	-
10X Thickness Measurement Range ¹	-	15 nm – 16 μm	-	-
15X Thickness Measurement Range ¹	1 nm – 30 μm	15 nm – 100 μm	1 nm – 100 μm	15 nm – 100 μm
20X Thickness Measurement Range ¹	-	15 nm – 6 μm	-	-
50X Thickness Measurement Range ¹	-	15 nm – 2 μm	-	-
100X Thickness Measurement Range ¹	-	15 nm – 1 μm	-	-
Accuracy ²	1 nm or 0.2%	2 nm or 0.2%	1 nm or 0.2%	2 nm or 0.2%
Precision ³	0.02 nm			
Stability ⁴	0.05 nm			
Measurement Speed	< 1s (Single Measurement)			
Light Source	Halogen + Deuterium Lamp	Halogen Lamp	Halogen + Deuterium Lamp	Halogen Lamp
Sample Size	Diameter from 1mm to 200mm or larger			

Interface Requirements	
Power Supply	110 - 240VAC, 50 – 60 Hz, 20 w
Data Interface	USB
Computer Configuration	
Operation System	Windows 11
Hardware	Host, Monitor, Keyboard, and Mouse

Spot Size	500μm Aperture	250μm Aperture	100μm Aperture
5X Objective	100 μm	50 μm	20 μm
10X Objective	50 μm	25 μm	10 μm
15X Objective	33 μm	17 μm	7 μm
50X Objective	10 μm	5 μm	2 μm
100X Objective	5 μm	2.5 μm	1 μm

1.Depends on the specific material

2.Si/SiO₂ (500~1000nm) standard film sample

3.Calculate the 1x standard deviation of 100 measurements of a 500nm SiO₂ standard wafer, and take the average of the 1x standard deviations over 20 valid measurement days

4.Calculate the average of 100 measurements of a 500nm SiO₂ standard wafer, and calculate the 2x standard deviation of the average values over 20 valid measurement days