



Film Thickness Measurement System **NanoSense**

NS-20 Series (Desktop Manual Equipment)



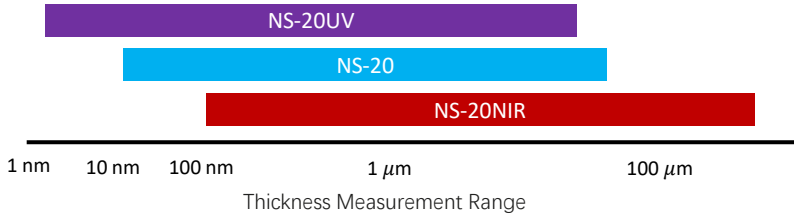
The NS-20 series is a desktop manual film thickness measurement and analysis system. While ensuring a compact and lightweight design, its accuracy and stability are in no way compromised. It possesses all the algorithmic software features of the NanoSense series, offering excellent value for money.

NS-20 Features

- Manual measurement with extremely high flexibility
- Standard spot size: 0.8mm ~ 1.5mm
- Capable of upgrading to 0.2mm spot size (NS-20 Pro)
- Customizable portable carrying case for on-the-go film thickness analysis
- Optional large-sized sample stage available



NS-20 Series Specifications



Model Type	NS-20UV	NS-20	NS-20NIR
Wavelength Range	190 nm - 1100 nm	380 nm - 1050 nm	950 nm - 1700 nm
Thickness Measurement Range ¹	1 nm – 40 μm	15 nm – 80 μm	150 nm – 250 μm
Accuracy ²	1 nm or 0.2%	2 nm or 0.2%	3 nm or 0.4%
Precision ³	0.02 nm	0.02 nm	0.1 nm
Stability ⁴	0.05 nm	0.05 nm	0.12 nm
Spot Size	1.5 mm		
Measurement Speed	< 1s (Single Measurement)		
Light Source	Halogen + Deuterium Lamp	Halogen Lamp	Halogen Lamp
Sample Size	Diameter from 1mm to 300mm or larger		

Interface Requirements	
Power Supply	110 - 240VAC, 50 – 60 Hz, 0.3 – 0.1 A
Data Interface	USB
Computer Configuration	
Operation System	Windows 11
Hardware	Host, Monitor, Keyboard, and Mouse

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