



Film Thickness Measurement System **NanoSense** NS-Touch Series



The NS-Touch series is an advanced handheld thin film measurement system with significant price advantages. It can quickly analyze the reflection spectral data of thin films within seconds and provide measurement thickness, capable of measuring single and multiple layers.

AR Coating Thickness Measurement

It's simple to measure anti-reflective coatings on curved eyeglass and other optical lenses.

Hard Coating Measurement

Simultaneously measure the thickness of hard coatings and primer layers.

Hydrophobic Layer Thickness Measurement

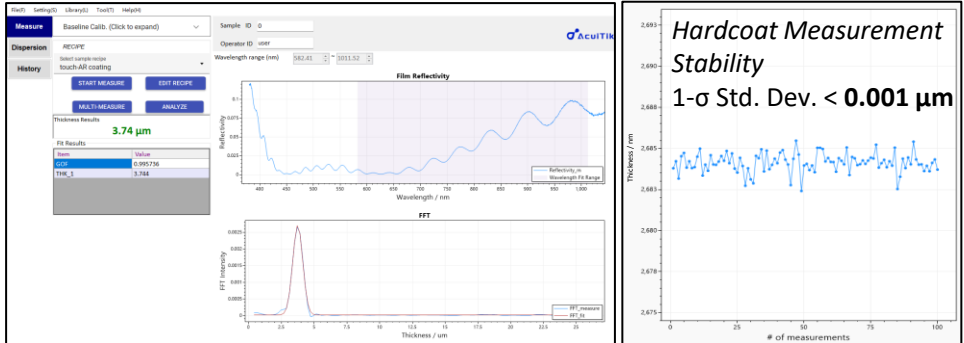
Hydrophobic layers are incredibly thin, about the thickness of a hundred atoms, necessitating the use of short-wavelength UV light for the most precise measurements.

NS-Touch Features

- **Effortless Calibration:** the AutoCal algorithm frees user from the daily hassle of calibration.
- **Enhanced Accuracy:** minimize back reflection interference, ensuring that the measurements are more precise and reliable.
- **User-Friendly Operation:** Benefit from an automatic sample detection algorithm that makes the measurement process intuitive and easy to use.



NS-Touch Series Specifications



Model Type	NS-Touch UV	NS-Touch	NS-Touch NIR
Wavelength Range	190 nm - 1100 nm	380 nm - 1050 nm	950 nm - 1700 nm
Thickness Measurement Range ¹	0.02 μm – 40 μm	0.05 μm – 80 μm	0.1 μm – 250 μm
Accuracy ²	0.01 μm or 0.2%	0.01 μm or 0.2%	0.02 μm or 0.4%
Precision ³	0.001 μm	0.001 μm	0.002 μm
Stability ⁴	0.001 μm	0.001 μm	0.002 μm
Spot Size	100 μm		
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

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