OPT – S9000

OPT-S9000 is an automatic monochromatic continuous wavelength spectroscopic ellipsometer, which has a wide variable incident angle range, high detection sensitivity. The wavelength is covered from ultraviolet (UV) to the near infrared (NIR) range according to user needs. The instrument uses a unique high stability phase shifter to greatly improve the sensitivity of the measurement, which eliminates the blind spot of ellipsometric angle measurement for the entire wavelength range. The product uses an auxiliary light source as sample collimator, which makes the operation simple, and can greatly save preparation time before the sample testing. It is a high-performance instrument to investigate multi-layer film materials for institutes and corporates.

OPTIONS

NEW

- ❑ COMBINED OPTICAL PROFILER
- ❑ Micro Spotsize
- ❑ Wafer Mapping
- ❑ 0-360 degrees full angle measurement without blind spot
- ❑ Automated Angle of Incidence 20-90°
- ❑ Motorized XY stage
- ❑ Simple and efficient sample collimator
- ❑ Liquid Cell
- ❑ CCD image camera
- ❑ Heater
- ❑ Speed typical measurement including data analysis

STANDARD FEATURES

- Continuous wavelength light source to provide users with great application of space
- Compensator technology to achieve accurate measurement range of 0-360 degrees full angle measurement without blind spot
- Simple and efficient sample collimator
- A wealth of material database
- Xenon lamp
- Allows the user to define dispersion model to study the optical properties of new materials
- Perspective of full wavelength multiple data fitting simultaneously, EMA model for multi-component compounds and surface roughness analysis
- 3D drawing capabilities with experimental data and simulation data
- Low noise acquisition

TECHNICAL SPECIFICATIONS

Wavelength range	*350-850 nm; 250-1100 nm; 250-1700 nm*
Thickness range of transparent and absorptive films	*0 - 30000 nm*
Accuracy of ellipsometric parameters	*tg (φ) ≤ 0.01, cos (Δ) ≤ 0.0001*
Wavelength accuracy	*1 nm*
Range of ellipsometric parameters	*Psi (0-90 degrees); Delta (0-360 degrees)*
Measurement time	*1 sec – 2.0 min.*
Sample Alignment	*Second laser alignment with automatic correction unit*
Sample stage	*Ø160 mm*
Range of angle	*20 – 90° ; 5° ± 0.01*