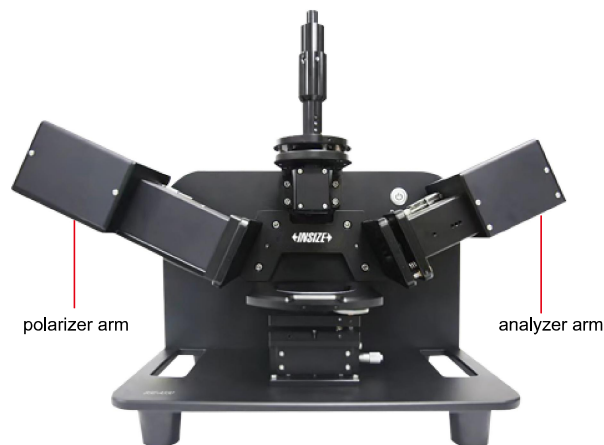


SPECTROSCOPIC ELLIPSOMETER

CODE BSE-A550

- Applicable to scientific research, semiconductors, photovoltaics, optical coatings, display panels, etc.
- Based on dual-rotating-compensator modulation technology, it enables one-time acquisition of spectra such as $\Psi(\Psi)/\Delta(\Delta)$ and $N/C/S$, and can achieve rapid analysis of the thickness and optical properties of single-layer to multi-layer micro-nano films on substrates
- Used for measuring parameters such as substrate and film layer thickness (d), refractive index (n), extinction coefficient (κ), and dielectric constant (ϵ)
- Including hundreds of material databases, multiple algorithmic models



SPECIFICATION

Spectral range		400~800nm
Spectral accuracy		$\Psi(\Psi)$: $\leq \pm 0.1$, $\Delta(\Delta)$: $\leq \pm 0.2$ (25nm silicon-based SiO_2 thin film, error model)
Incident angle		fixed-angle light path, 65°
Spot size		1~4mm
Focus finding method		manual focus finding by maximum light intensity
Maximum diameter of the sample		$\varnothing 180\text{mm}$
Film thickness	range	1~1000nm
	accuracy	$< 0.5\text{nm}$ (100nm SiO_2 film)
	repeatability	better than 0.02nm (100nm SiO_2 film, 30 times, 1σ)
Refractive index	accuracy	± 0.009 (100nm SiO_2 film, visible band)
	repeatability	better than 0.001 (100nm Si-based SiO_2 film, $n@632.8\text{nm}$, 30 times, 1σ)
Single-point measurement time		$\leq 10\text{s}$
Lifetime of halogen light source		2000 hours for normal use
Movement range of Z-axis		0~10mm
Pitch angle of sample stage		$> \pm 2^\circ$, manual adjustment
Algorithmic model		optical constant models as well as oscillator models (Cauchy model, Sellmeier model, Lorentz model, Gaussian model, Drude model, etc.) support graphical multi-vibrator hybrid model fitting function, B-spline fitting function
Working environment		temperature: $20\sim 26^\circ\text{C}$, humidity: $35\%\sim 60\%\text{RH}$, cleanliness: Class10000
Power supply		220V, 50Hz
Dimension (L×W×H)		675×325×525mm
Weight		65kg

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Standard silicon wafer	1 set
Mounting tool	1 set
Stable voltage supply	1 pc

OPTIONAL DELIVERY

Vibration isolation platform	0790-B88A
Negative pressure adsorption pump	BSE-A550-PUMP