

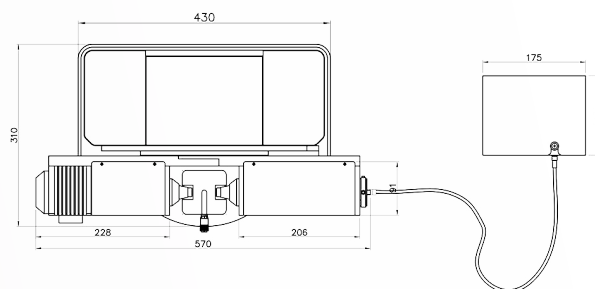
Variable Angle Spectroscopic Ellipsometer

Model No: HO-SE-01XY

Spectroscopic Ellipsometer is a non-contact instrument widely used for thin film analysis and measurements. Holmarc's Spectroscopic Ellipsometer model HO-SE-01 incorporates Rotating Analyzer Ellipsometry(RAE) technology to characterize thin film samples. It uses a high speed CCD array detector to collect the entire spectrum. It measures films from nanometer thickness up to tens of microns and the optical properties from transparent to absorbing materials. It accurately measures optical constants like refractive index, film thickness and extinction coefficient.

HO-SE-01 model is equipped with a 50W Halogen lamp as the light source. A set of motorized rotatable Glan-Thompson polarizers are used as the Polarizer and the Analyser. A motorized Z stage is provided for the automatic focusing of sample and a manual tilting platform is provided for the sample alignment. A motorized XY stage with 30 mm x 30 mm travel is also provided for positioning the sample for measurement at different locations. An optical fiber with SMA connector is used to couple the reflected light from the sample to the spectrometer.

A user-friendly measurement software is provided for the initial calibration and automatic measurements. An analysis software with advanced mathematical fitting algorithm is provided for the deduction of thickness and optical properties from the measured data..

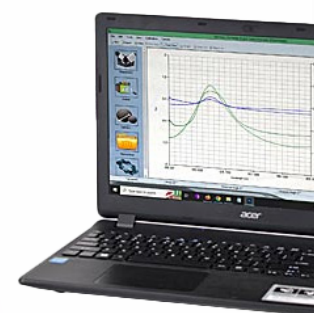


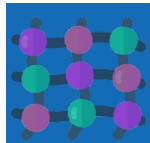
Features

- Advanced mathematical fitting algorithm
- Selection of different optical models
- User extendable optical models
- Data can be save as Excel or text files
- Dedicated software for analysis
- Automated operation
- Automatic sample focusing

Specifications

	HO-SE-01	HO-SE-01XY
Spectral Range	450 - 800 nm	450 - 800 nm
Ellipsometer configuration	RAE	RAE
Detector	3648 pixel CCD linear sensor	3648 pixel CCD linear sensor
Spectral resolution	1 nm	1 nm
Light Source	Halogen	Halogen
Incident angle	50 - 75 degree (Resolution 0.1 degree, Automated operation)	50 - 75 degree (Resolution 0.1 degree, Automated operation)
Thickness measurement range	20 nm - 10 microns	20 nm - 10 microns
Accuracy	+/- 3 %	+/- 3 %
Resolution of measured R.I	0.001	0.001
Sample thickness	0.3 mm - 8 mm	0.3 mm - 8 mm
Sample XY Stage travel		30 mm x 30 mm (motorized)
Sample focusing	Automated	Automated
Sample alignment	Manual tilt	Manual tilt
Sample measurement	Automatic	automatic
Thickness analysis	Advanced mathematical fitting algorithms	Advanced mathematical fitting algorithms





Motorized Sample XY Stage

30 mm x 30 mm



Incident angle

50 - 75 degree (Resolution
0.1 degree, Automated
operation)



HO-SE-01XY



HO-SE-01

