



## AutoEL II SPECIFICATIONS

OPERATING PRINCIPLE: Null Seeking

OPERATING WAVELENGTH: 632.8nm

RESOLUTION & ACCURACY:

Polarizer or Analyzer	0.05°
DELTA	0.1°
PSI	0.05°

Resolution and accuracy of measured film thickness and film or substrate refractive index depends on the film-substrate system and the film thickness. 3 to 10 Angstroms and 0.01 refractive index units are typical for silicon oxide films on silicon.

ANGLE OF INCIDENCE:

Standard Pin Locations	70° ± 0.02° and 90° ± 0.02°
Optional Pin Locations	60° to 90°

Optional pin locations are available at additional cost. Non-pin located angles may be set with specially cut alignment prisms.

MEASURING TIME (No Calculations):

Typical	12 seconds
Maximum	40 seconds

DISPLAY:

Displays DELTA and PSI as well as prompting message to the operator.

DIGITAL OUTPUT:

Serial ASCII, RS-232  
SEMI Communication Standard

MAXIMUM SAMPLE SIZE AND MOUNTING PLANE:

6" x 6" (15.2cm x 15.2cm). Horizontal with vacuum holddown. Vacuum source not supplied.

SAMPLE STAGE:

The standard sample stage has vertical adjustment plus tilt adjustments about vertex of angle of incidence and about axis formed by intersection of plane of incidence with plane of sample.

## AUTOCOLLIMATOR/MICROSCOPE :

Autocollimator permits sample alignment accuracy of  $\pm .02^\circ$ . Objective lens for microscope function is screw mounted and removable. Microscope function provides 90X magnification and internal sample illumination.

## POWER REQUIREMENTS :

## Domestic

115V  $\pm 10$ V 50/60Hz 130W

## Export

100V  $\pm 10$ V 50/60Hz 130W

## Export

220V  $\pm 20$ V 50/60Hz 130W