

Silicon Wafer Thickness Sensor

SIT-200

- All-optical, non-contact thickness sensor for silicon wafers
- High dynamic range capable of measuring disordered surfaces
- Capable of in-situ measurement during wet-etching



10 - 500µm Wafers 0.05µm Resolution



SIT-200 Main Controller

Tunable Laser, High Dynamic Range

The SIT-200 uses a high-speed swept tunable laser, as opposed to a broadband source, to probe the wafer under test. This enables higher-power measurement per wavelength, leading to high dynamic range. As a result, thickness measurements can be performed even on un-polished wafers, for example during/after wet-etching.

Specifications

Parameter			Unit
Optical Probe	Signal Source	Tunable laser (wavelength 1515~1585nm)	dB
	Output Power	>0.6	mW
	Spot Size	50	μm
Measurement	Thickness Range ¹	10 - 500 (when n= 3.5)	μm
	Reolution	0.05	μm
Interface		Front panel (Local), Ethernet (Remote)	
Power Supply	Main Controller	AC 100-240 (50/60Hz)	Vac
	Stage Controller	AC 100-240 (50/60Hz)	Vac
Dimensions (W x H x D)	Main Controller	364 x 147 x 391	mm
	Stage Controller	165 x 100 x 300	mm
Weight	Main Controller	9.0	kg
	Stage Controller	5.0	kg
	Optical Probe	1.6	kg

^{1.} When refractive index of wafer is n=3.5. Note: The above specifications may change without prior notice

Ordering Information

For orders, questions, specific requirements or to learn more about the FDM-OTDR, contact us at: sales@alnair-labs.com