

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

High Sensitivity

High Accuracy

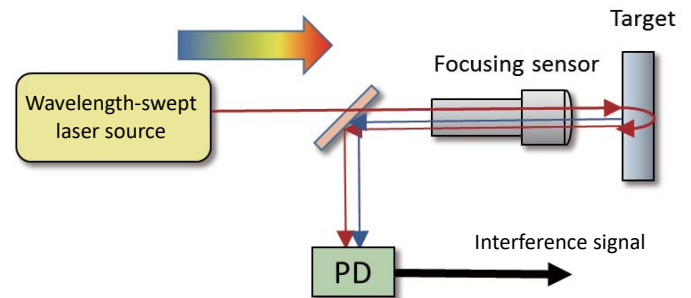
20ms High-speed

Remote



System Construction

Silicon Wafer Thickness Sensor is constructed with a precisely tuned wavelength-swept laser source, focusing sensor and optical receiver (PD). The wavelength-swept light is focused on the target, and the interference pattern formed by reflection from the target surface and back is detected by the PD after passing through the sensor.

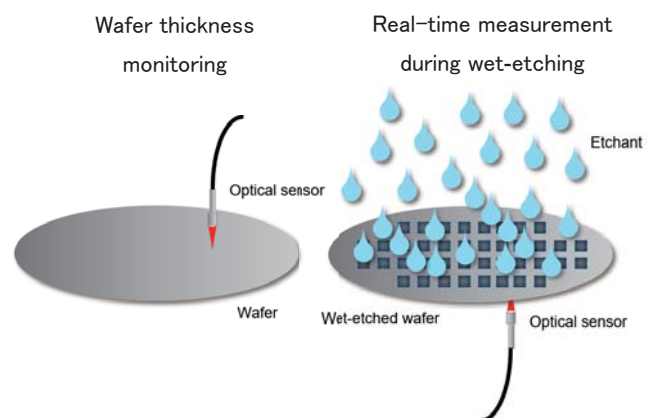


Specifications

		unit
Measurement target	Silicon wafer	
Measurable thickness	10 ~ 500 (n=3.5)	μm
Light source	Wavelength swept laser source (1515 ~ 1585)	nm
Optical output power	0.6, Laser class 1	mW
Guiding light source	Red LD, Laser class 1M	
Measurement time	Minimum 20	ms
Repeatability	Less than 0.1 (3σ)	μm
Monitor output	Interference signal (electrical)	
PC interface	Ethernet	
Power supply	AC 100-240 (50 / 60 Hz)	V
Dimension (W x H x D)	364 x 147 x 391	mm
Weight	9.0	kg

The above specifications may change without prior notice.

Applications



Ordering Information

SIT - 200

