ellipsometers

multiwavelength laser ellipsometers

Model LSE-WS with 2 Wave option L2W544 shown above

multiwavelength ellipsometers description

Multiwavelength Laser Ellipsometers give the user greater versatility in thickness and refractive index measurement of thin transparent and semi-transparent films. Laser light sources have ample light intensity for increased measurement accuracy of absorbing and rough scattering films. Laser sources have the added advantage of being spectrally precise, stable and long lasting. Their use permits optimum instrument design with optics, detectors and other components so that measurements can be made highly accurate. Separate laser sources offer backup reliability important to continuous operation and they are a excellent alternative to overly complicated less precise spectroscopic ellipsometers..

features

- Measure thick films without thickness period ambiguity
- Variable wavelength useful for difficult to measure films.
- Get refractive index in near period regions
- Trouble-free, no moving parts advance StokesMeter™ measurement head.
- Measures complete state of polarization useful for rough,scattering samples.
- Measure photoresist index closer to exposure wavelengths
- Get dispersion with two or three values of refractive index
- Analyze difficult to measure films like Poly, Plasma Nitride and Silicon on Sapphire
- Improves modeling results using more measured data for complicated structures
- Simpler and less complex than spectroscopic ellipsometers.

OPTIONAL LASERS FOR STOKES ELLIPSOMETERS:

405 nm Laser Diode
544 nm HeNe Gas Laser
633 nm HeNe Gas Laser standard
830 nm Laser Diode

SINGLE LASER SUBSTITUTION Options

LS405 Substitutes 405 nm Blue laser diode in place of standard 633 nm HeNe Gas Laser
LS544 Substitutes 544 nm Green HeNe Gas laser in place of 633 nm HeNe Gas Laser
LS830 Substitutes 830 nm laser diode in place of 633 nm HeNe Gas Laser

ADD ADDITIONAL LASER FOR A 2 WAVELENGTH ELLIPSOMETER

L2W405 Adds 405 nm Blue Laser Diode to 633 nm ellipsometer
L2W544 Adds 544 nm Green HeNe Gas Laser to 633 nm ellipsometer
L2W830 Adds 830 nm laser diode to 633 nm ellipsometer

ADD TWO ADDITIONAL LASERS FOR A 3 WAVELENGTH ELLIPSOMETER

L3W405.544 Adds 405 Laser Diode and 544 Green Gas Laser to 633 nm ellipsometer
L3W405.830 Adds 405 Laser Diode and 830nm laser diode to 633 nm ellipsometer
L3W544.830 Adds 544 Green Gas Laser and 830nm laser diode to 633 nm ellipsometer

Software for multiwavelength laser ellipsometers

LGEMP 4 Layer Absorbing Program for Windows and LMOD 4 Layer Simultaneous Modeling Program for Windows are included with Multiwave Ellipsometers.

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