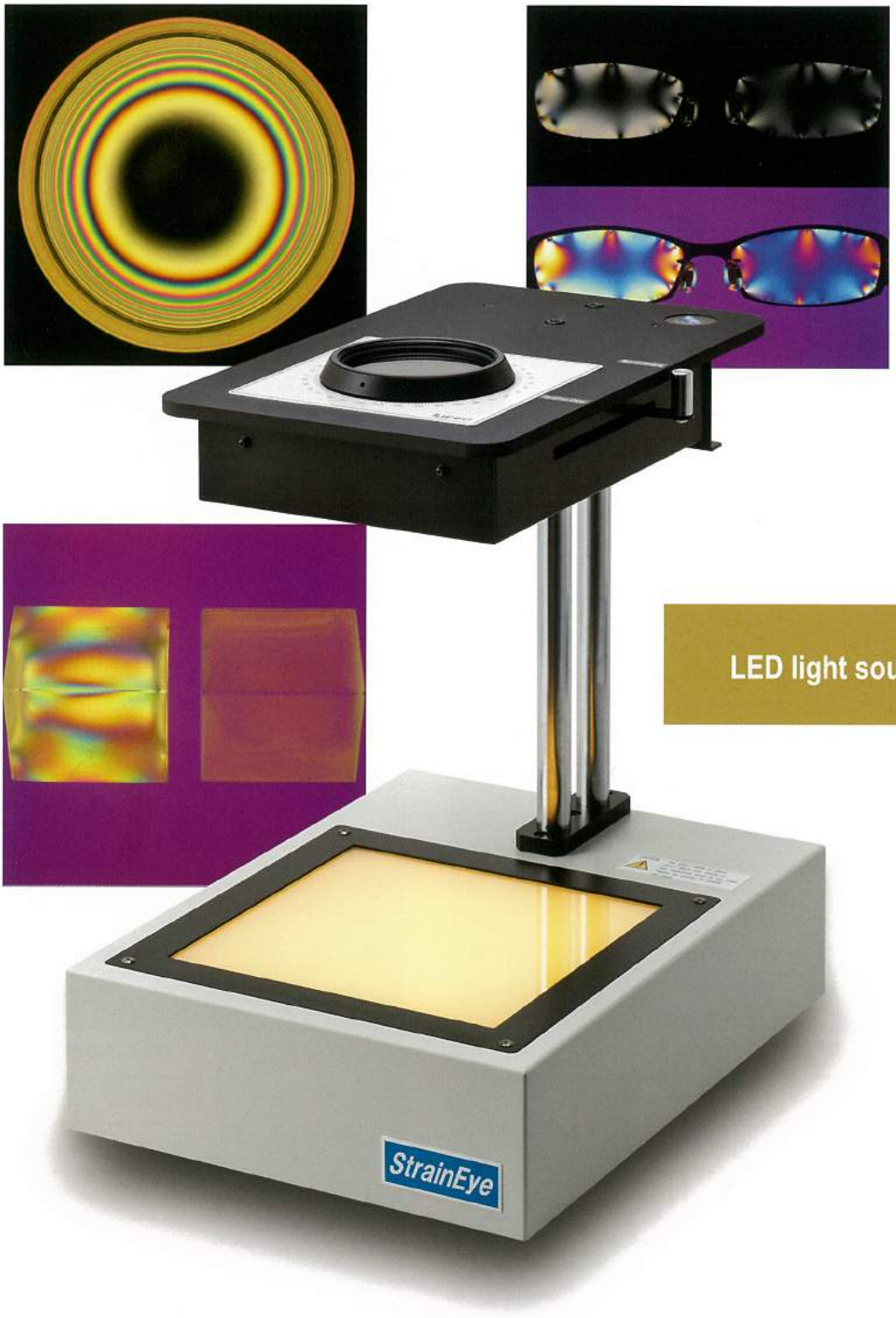
StrainEye

Polariscope

LSM-4000LE Series



LED light source new type

High sensitive polariscope by proffesional optical manufacturer

luceo

LSM-4100LE LSM-4200LE LSM-4300LE

Our own technique enable high quality. Polariscope LSM-4000LE Series don't overlook even small strain.

LSM-4100LE

Crossed Nicols Method Type
which can provide clear observations of the presence of strain;

< Test object >
● Glass ● Clear Plastics ● Film

Contents	Specification
Size	W280×D375×H415mm
Weight	10Kg
Effective Dimension of Polarizer (PL)	W200×D200mm
Effective Dimension of Analyzer (AN)	φ110mm
Length between PL and AN	300mm
Inspection Method	Crossed Nicols Method
Light Source	White LED 3,000K
Power Consumption	14W
Power Source	AC100～240V 50／60Hz

LSM-4200LE

Circularly Polarizing Light Method Type
with which the distribution pattern of strain is not changed even though an object to be observed is rotated;

< Test object >
● Glass ● Clear Plastics ● Crystal (detecting striae)

Contents	Specification
Size	W280×D375×H415mm
Weight	10Kg
Effective Dimension of Polarizer (PL)	W200×D200mm
Effective Dimension of Analyzer (AN)	φ110mm
Length between PL and AN	300mm
Inspection Method	Circularly Polarizing Light Method
Light Source	White LED 3,000K
Power Consumption	14W
Power Source	AC100～240V 50／60Hz

There is the possibility that solid material like a glass, plastics, crystal has strain cause of residual stress which generated during producing process. The residual stress maybe causes the delay destruction, or optical adverse effect. Polariscope is a equipment which detects strain from residual stress or quantify it.

Four types of inspection method, Crossed Nicols Method, Circularly Polarizing Light Method, Sensitive Tint Color Method and Senarmont Method are selectable.

LED light source is adopted for this polariscope. That reduce maintenance for replacing the light source. And also, that reduce running cost since the power consumption is lawer.

Free power supply don't limit the country of use.

LSM-4400LE

LSM-4300LE

Sensitive Tint Color Method Type

which can discriminate extremely slight strain and analyze the direction of stress;

< Test object >

● Glass ● Clear Plastics ● Film

Contents	Specification
Size	W280×D375×H415mm
Weight	10Kg
Effective Dimension of Polarizer (PL)	W200×D200mm
Effective Dimension of Analyzer (AN)	φ110mm
Length between PL and AN	300mm
Inspection Method	Sensitive Tint Color Method
Light Source	White LED 3,000K
Power Consumption	14W
Power Source	AC100～240V 50／60Hz

LSM-4400LE

Mix Type

Three types of polariscopes workable according to Crossed Nicols Method, Sensitive Tint Color Method and Senarmont Method, respectively, with those which observations of the presence of strain, analysis of stress direction and quantitative measurement of strain are executable;

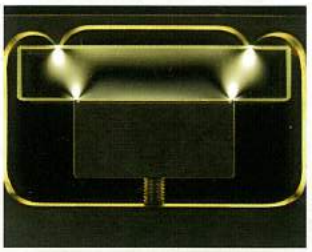
< Test object >

● Glass ● Clear Plastics ● Film (measuring retardation)

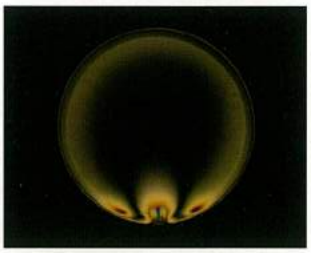
Contents	Specification
Size	W280×D375×H430mm
Weight	11Kg
Effective Dimension of Polarizer (PL)	W200×D200mm
Effective Dimension of Analyzer (AN)	φ114mm
Length between PL and AN	285mm
Inspection Method	Crossed Nicols Method / Sensitive Tint Color Method Senarmont Method
Light Source	White LED 3,000K
Power Consumption	14W
Power Source	AC100～240V 50／60Hz

LSM-4410LE

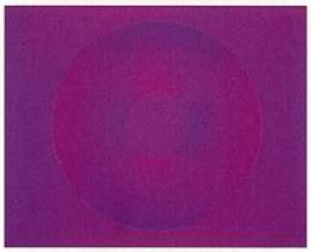
■ Example



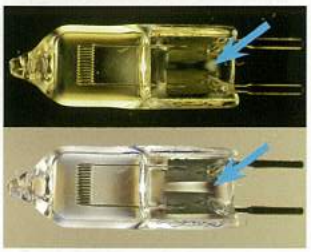
Crossed Nicols Method
Glass applied load



Circularly Polarizing Light Method
Plastic lens



Sensitive Tint Color Method
Hard disk glass



Senarmont Method
Halogen lamp

LSM-4410LE

Mix Type

Two types of polariscopes workable according to Sensitive Tint Color Method ans Senarmont Method, respectively, with those which analysis of stress direction and quantitative measurement of strain are executable., and also, these method can be changed easily with an alternative lever;

< Test object >

● Glass ● Clear Plastics ● Film (measuring retardation)

Contents	Specification
Size	W280×D375×H430mm
Weight	12 Kg
Effective Dimension of Polarizer (PL)	W200×D200mm
Effective Dimension of Analyzer (AN)	φ80mm
Length between PL and AN	250mm
Inspection Method	Sensitive Tint Color Method / Senarmont Method
Light Source	White LED 3,000K
Power Consumption	14W
Power Source	AC100～240V 50／60Hz

■ Minor change

"AN height" is changeable. And also, "Adjustment function of AN height" is available. Standard models have their own fixed length between AN and PL.

If you inspect a tall sample or short one, Changing "AN height" may be convenient for you.

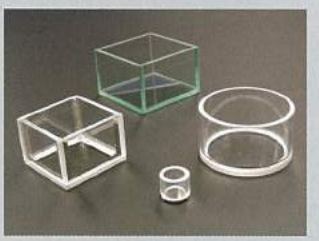
If you inspect both tall sample and short one, "Adjustment function of AN height" maybe help your inspection.

Please feel free to contact us if you have any requests for other customizing.

■ Option

The sample which has asperity or curve like a lens should be inspected with soaking in immersion liquid.

We can make various kinds of glass cell according to customer's individual needs.



■ Test object

The sample is limitted to transparent material. It may be unavailable for law transmittance or law transparency sample.

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