

# Scattered Light Photoelastic Stress Meter

**Model: SLP-2000**

**Price JPY4,500,000-**



This machine is available to measure stress distribution of chemically tempered glass which is strengthened by ion-exchange from Li<sup>+</sup> to Na<sup>+</sup> using scattered light photoelasticity. In case of that the glass is strengthened by mixed liquid KNO<sub>3</sub> and NaNO<sub>3</sub>, K<sup>+</sup> layer should be measured by FSM-6000LE and Na<sup>+</sup> layer should be measured by SLP-1000. These data can be combined by special software.

\* The combination requires optional FsmV dongle.

<Standard Deviation>

$\sigma$

| Model    | Wavelength | CT_CV   | DOL_Zero |
|----------|------------|---------|----------|
| SLP-1000 | 640nm      | 5.65MPa | 2.16um   |
| SLP-2000 | 518nm      | 1.51MPa | 1.42um   |
| SLP-2000 | 405nm      | 1.00MPa | 1.27um   |

- Actual data measuring the standard glass 20 times
- Required Refractive index and Photoelastic constant at the wavelength for measurement

## Specification

|                        |   |
|------------------------|---|
| Measurement range      | : CS 0-2000MPa, DOL 10-600um  |
| Measurement resolution | : Stress 5MPa Depth 5um   |
| Measurement precision  | : 50um or deeper from surface Stress $\pm 10$ Mpa Depth $\pm 10$ um<br>(For standard glass) |
| Light source           | : LD 518nm 30mw Class 3B or 405nm 30mW Class 3B   |
| Application            | : Chemically tempered glass, DIOX glass, Thermally tempered glass                           |
| Sample shape           | : Flat-1000R 10x10mm or more  |
| Prism refractive index | : 1.518 @518nm / 1.530 @405nm   |
| PC                     | : Preinstalled OS, special software   |
| OS                     | : Windows 10 professional edition   |
| Size (main body)       | : W320xD280xH220mm  |
| Weight (main body)     | : 10kg  |

\* The combination requires optional FsmV dongle.

\* In case of using 405nm LD continuously for a long time, the optical parts in the machine are damaged. Therefore, the parts replacement is necessary in a short cycle.

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