

# Reflection Measurement Systems

SGRM-200N



Application Systems

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Microscope Unit

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Observation

**Bio-photonics** 

Laser Processing

This device allows the measurement of spectral reflectivity in fine areas and curvature surfaces. For lenses with curvature or ultra-thin samples such as functional sheets, high-speed and high-accuracy measurement of spectral reflectivity can be realized without being affected by reflected light on the rear surface.

- With a special half mirror, allows efficient reflection of light into the spectrophotometer and fast measurement even at the low reflection samples.
- With a special half mirror, prevents reflection from the rear surface and allows accurate measurement without any treatment for the sample rear surface. (can measure for thin plate thickness of 0.3mm when using 20x objective lens)
- Maximized the amount of light by special halogen lamp and unique optical design, allows speedy and high reproducibility measurement.
- With very tiny area (φ50μm) measurement, allows measurement of curvature lens surface and coating uniformity.
- Compact design for a space saving.
- Data to be saved to Microsoft<sup>®</sup> Excel<sup>®</sup> spreadsheet.
- Multiple measurement results can be overlaid for easy comparison. Fast analysis for good and bad.

# Reflectance measurement Transmittance measurement Chromaticity measurement Thickness measurement Peak monitoring function



Specifications	
Part Number	SGRM-200N
Wavelength Range	380 – 1050nm
Object Side N.A,	0.22 (When using 10× objective lens) 0.44 (When using 20× objective lens)
Measurement Area	about $\phi$ 25 $\mu$ m (When using 10× objective lens)
Measurable Surface Curvature of Object	–2R – –∞, +2R – ∞
Measurement Reproducibility	±0.2% (380 – 450nm) ±0.02% (451 – 950nm) ±0.2% (951 – 1050nm)
Readable Resolution	1nm
Measurement Time	a few seconds (depends on the sampling time)
Outer Dimension (Main unit)	270(W) × 465(D) × 615(H)mm (excluding protrusions)
Operating Temperature	18 – 28°C
Ambient Humidity	≤ 60% (Non-condensing)





Application Systems

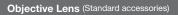
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Objects Lens UPLFLN10×



Measurement range: φ50μm Thin plate: 0.4mm

### Objects Lens LUCPLFLN 20×



Measurement range: φ25μm Thin plate: 0.3mm

Objects Lens PLAPON 1.25×



Measurement range: φ400μm

### Standard Diffusing Reflector

WS-3 (Option)



\*as a standard when measuring the color

# **Optical Color Glass**

V-30 (Option)



\*calibration data included

### Super C Mount Zoom Adapter

 $(\times 0.35 - \times 0.7)$ 



### 5.0 Mega-pixels USB Camera

STC-MCA5MUSB3



### **Adjusters** Motoeized Stages Reflection Measurement Software: SGRMCS (Standard accessories)

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# NY-CZ (Option)





- - (Software and Hardware)
- Measurement data overlay function (MAX 64 times)
- Data export function in Microsoft® Excel®
- Good/Bad analysis function (set by each 1nm wavelength)
- Film thickness measurement function (single layer only)

### Service parts (Standard accessories)

Halogen lamp (5 pcs set) PCL919SMR02VN



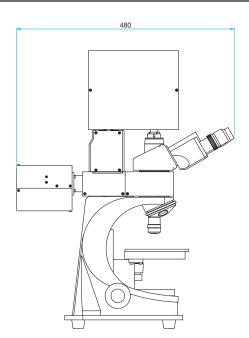
Low reflection rate referenceplate Plano Concave Lenses SLB-50-70N

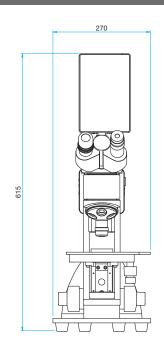


High reflection rate reference plate Aluminum Mirrors TFA-50C08-1



## **Outline Drawing**





Weight:13kg(cables excluded)