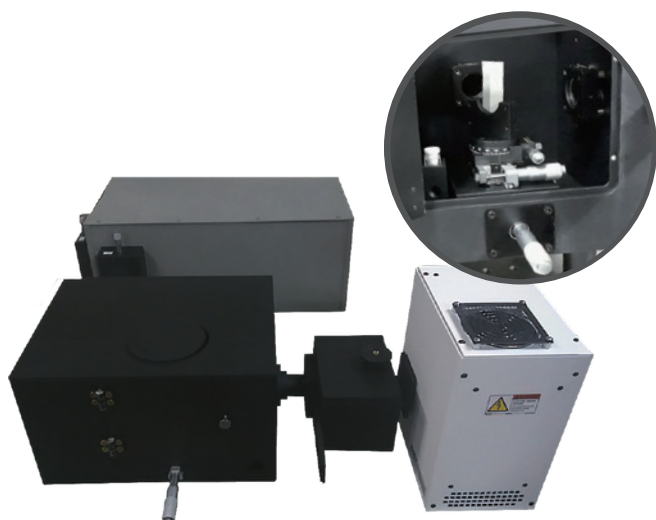


SC-100 | ATR / Macro PL



Key Features

- Ultra Low Abberation
- Compact & Economical Design
- Multiple Excitation Source

Detail Features

- Compact Modular Design
- Free or Fiber Coupled Input / Output
- Variable Laser Line Combined for Different Application up to 6 Lasers
- Time Gated System to Enhance the Signal About 100 - 10000 times
- Manual & Motorized Control : Laser Power, Input Beam Line, Orientation of Polarizer & Grating
- Compatible with Time Correlated Single Photon Counting

Specification

Excitation Source

Laser Type (Wavelength)	266 / 325 / 532 / 632.8 / 785 / 1064 nm (Up to 6 Different Laser)
Lamp Type	Xe Lamp, Halogen Lamp
Monochrome Type	MonoRa 200 & Xe Lamp

Spectrograph

Focal Length	200 / 320 / 500 mm
Spectral Resolution	0.1 nm
Stray Light Rejection	1.0×10^{-5}

Sample Chamber

Chamber Type	Compact & Simple Structure Xyθ Manual Stage for Sample Position Color & Spherical Corrected Al Mirror for Input Source & Signal
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Detector

Type	PMT (R928) / Si / InGaAs
Spectral Range	185 ~ 900 nm / 900 ~ 1800 nm
Type (CCD)	TE Cooled CCD (Open Electrode)
Pixel Format	1024 * 256

Software

Functions	Select Monochromator, Serial Port , Turret, Grating & Current Wavelength Information, Wavelength Range, Number of Point / Resolution, Integrating Time, Accumulation
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SC-100 System | ATR / Macro PL



Application

- Semiconductor Characterization (GaN / SiC or Si) (III-V Materials)
- Device Characterization
- Sensor Development for NIR CCD
- Gemstone PL, Diamond by HPTP, Pearl
- Development of Material of LED with GaN / GaAs
- Deep UV Diode Laser & PD Development (III-Nitrides (AlGaIn) and SiC)
- Temperature Dependent PL & Internal Quantum Efficiency
- Reflectance & Transmittance measurement (SiC / Si / Sapphire Substrate)
- Photoluminescence Excitation (PLE) to Measure the Energy Levels (Properties of Absorption & Recombination)

Specification

Input Laser Source

532 nm Solid State Laser set	200 mW @ 325 nm
Output Power	

Sample Chamber

Chamber Type	Macro Sample Chamber for PL,Raman, RT (Optional Reflection and Transmission)
Refocusing Type	Refocusing Assembly with 45 Degree Al Mirror set
Wavelength Range	200 ~ 5000 nm
Optics & Mount	Included Suitable Optics (PLX Lens, Flat Al & Off Axis Parabolic Mirror etc.) & Mount
Iris Type	Iris Diaphragm set for Optical Path & Laser Beam Alignment
Stage Type	Rotation & Translation Manual Stage For Sample Align & Enhance the Power Density on Sample
Wavelength Range	2 degree 0.01 mm
Adjustable Range	+/- 25 mm
Extra Features	Cuvett Cell Holder and Sample Plate

Spectrograph

Focal Length	200 / 320 / 500 mm
Wavelength Range	200 ~ 1600 nm
Resolution	0.2 nm @ 435.8 nm
Accuracy	+/- 0.25 nm
Repeatability	+/- 0.04 nm

PMT Detector

	R955 / R928 Photomultiplier Tube
PMT Detector	185 ~ 900 nm Detecting Range (85 % @ 400 nm)
	16 Bit AD Converter

CCD Detector

	1024 * 256 Pixel CCD
CCD Detector	26 * 26 um Pixel Size
	200 ~ 1000 nm Detecting Range (95 % @ 800 nm)

Software

Features	Easy Parameter Selection
Functions	Select Monochromator, Serial Port, Turret, Grating & Current Wavelength Information, Wavelength Range, Number of Point / Resolution, Integrating Time, Accumulation
Calibration	Semi-auto Calibration

Options

	Detectors for UV – VIS – NIR
	Low Temp Application for TDIPL
	Mapping Function for Low & High Scan Speed