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*

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*

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 (AlGaN) 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 Output Power	200 mW @ 325 nm

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

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

CCD Detector

CCD Detector	1024 * 256 Pixel CCD
	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