



Microscope Applications Product Line Card

2025 V1

For customized projects please Contact us:

info@simtrum.com

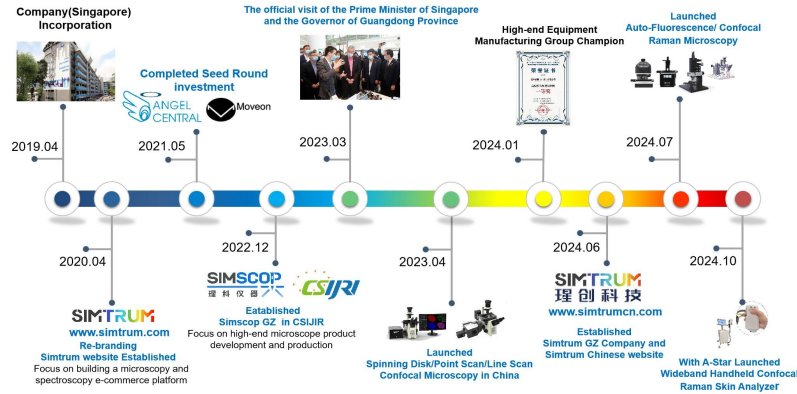
Company Profile

Established in Singapore in 2019, SIMTRUM Group specializes in innovation and applications within microscopy and spectroscopy. Its core team brings decades of optical technology expertise. In 2022, the company partnered with the CSIJRI in Guangzhou to establish a joint R&D laboratory for microscopy with independent research capabilities. The team now includes multiple Ph.D. graduates from the National University of Singapore (NUS), and has grown to dozens of members.

SIMTRUM has collaborated with leading institutions such as Nanyang Technological University (NTU), NUS, A-Star, and Xiamen University to develop high-end microscopy systems. In March 2023, the company's Guangzhou R&D center was visited by former Singapore Prime Minister Lee Hsien Loong and the Governor of Guangdong Province. Later that year, SIMTRUM won first prize in the startup category of the Guangzhou Technology Innovation and Entrepreneurship Competition and secured multiple technology patents.

Vision: To be a leading photonics technology company that truly understands and adds value to our customers.

Mission: Driven by innovation, we deliver exceptional services and precise products to global photonics users, empowering customer success and advancing industry transformation.

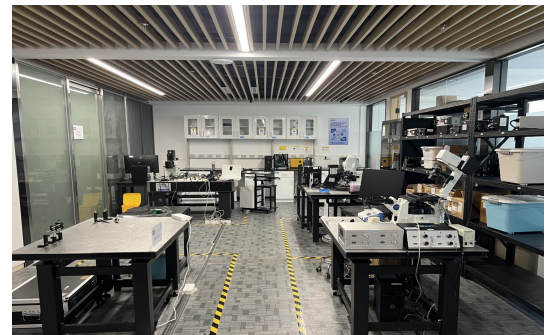
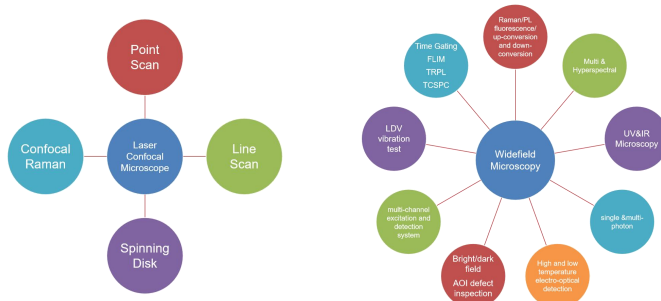


Company Milestones

Optical R&D Laboratory

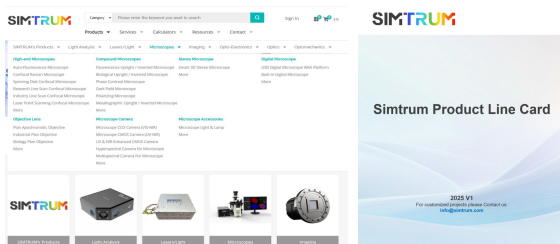
We have established a fully-owned optical laboratory in Guangzhou operating as a subsidiary of Simscop Instruments. This facility specializes in the R&D and manufacturing of high-end microscope systems and critical equipment components.

Our proprietary microscope systems include confocal laser microscopes and wide-field microscopes, along with core components such as detection modules, photomultiplier tubes (PMTs), silicon photomultipliers (SiPMs), multi-channel lasers, and motorized filter wheels. Additional products are currently under development.



Real scene of optical R&D laboratory

Focus on microscopy and spectroscopy e-commerce platform



Simtrum is a specialized e-commerce platform dedicated to microscopy and spectroscopy, serving scientific research, industrial, and healthcare fields with high-quality products and aiming to be a trusted partner in the sector.

The platform features seven major product categories: Microscopes, Light Analysis, Lasers/Light sources, Imaging, Opto-Electronics, Optomechanics, and Optic, offering over 4,000 products in total. Each category is equipped with a product line card to facilitate efficient selection.

As a supply chain-integrated systems provider, Simtrum employs a rigorous testing system where every product undergoes professional inspection and performance verification before launch. This ensures reliability and delivers a ready-to-use, worry-free experience for customers.

E-commerce platform website: www.simtrum.com

With 10 years of expertise, we support 3,000+ customers with 30+ tailored solutions.
Trust Simtrum for your microscopy and spectroscopy needs.

Microscope Systems



**Point Scanning
Confocal Microscope**



**Line Scanning
Confocal Microscope**



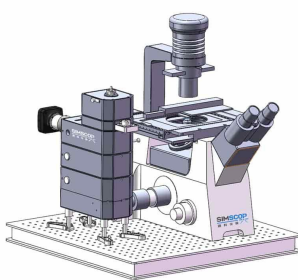
**Spinning Disk
Confocal Microscope**



**Structured Illumination
Microscope – SpinDisk SIM**



**Widefield/confocal upright
Raman, PL, fluorescence
multifunctional microscope**



**Widefield/confocal inverted
Raman, PL, fluorescence
multifunctional microscope**



**Industry Auto-Fluorescence
Microscope**

Microscope Accessories



Motorized Filter Wheel



FWR Motorized filter wheels



XY Microscope Stages



**Microscope and
Spectrometer Light Source**

Microscope Accessories



**Supercontinuum light
source 450-2400nm**



**Narrow Linewidth
Diode Lasers**



**Multi channel
Multi-mode laser**



**Multi channel
Single-mode laser**



**High Sensitivity
Photodiode Detector**



**High Sensitivity Silicon
photomultiplier (SIPM)**



**High Sensitivity
Photomultiplier Tube**



**Si-APD Ultra-sensitive
photodetector (VIS-NIR)**



**High Sensitivity sCMOS
Camera**



**SW/MW/LWInfrared
Cameras**



**In-vacuum CCD
Cameras**



**Solar Blind UV
Imaging**

Microscope Accessories



Optical Heating & Cryo Stage

- Temp: -190°C to 1200°C
- Prob pin resolution 1nm



X-ray/XRD Heating & Cryo Stage

- Temp: -190°C to 1200°C
- Prob pin resolution 1nm



Electrical Probe Temperature Stage



Adjustable Electrical Probe Station- Manual



Spatial Light Modulator



VUV Light Sources



Single-photon time counter



AOM/AOTF AOD/EOM

Other Systems



Maskless lithography UV laser writer



Laser Doppler Vibrometer



Multi-Point LDV



OCT Imaging System

Spectrometers 200nm to 2.5 μ m



Standard Spectrometer
200-1100nm



**High Sensitivity UV
Enhanced Spectrometers**



**BSI Cooled High Sensitivity
Spectrometers**



Near Infrared Spectrometer
900 – 2500nm



**Large NA High Sensitivity
Raman Spectrometer**



Multi Channel Spectrometer



VUV/UV Spectrograph

Raman spectrometer 532/780/1064nm



**Handheld Raman
Spectrometer**



**OEM Handheld Raman
Spectrometer**



**Portable Raman Systems -
Research Edition RMT KY**

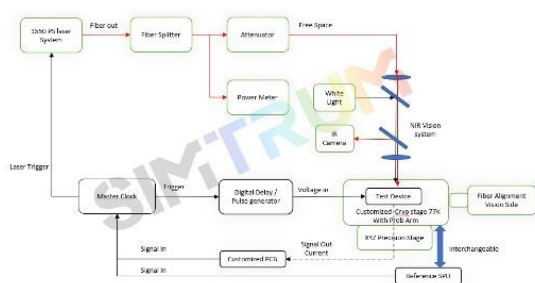


**Portable Raman Systems -
Industrial Edition RMT GY**

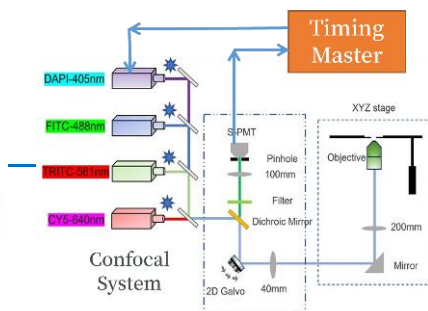


**Portable Raman Systems -
Food and Drug Edition RMT SY**

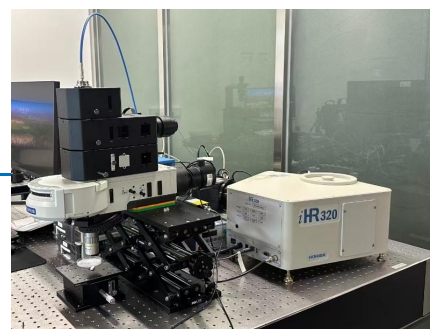
Solutions



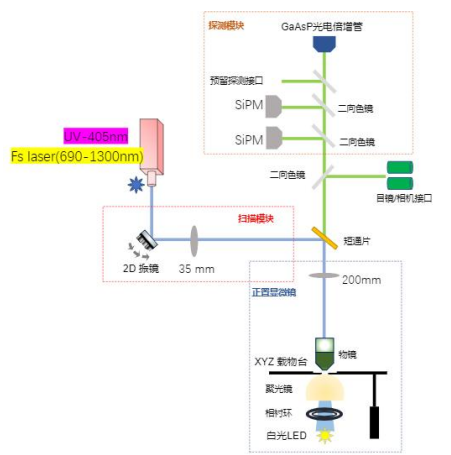
TCSPC System for SPAD (APD) Testing Solution



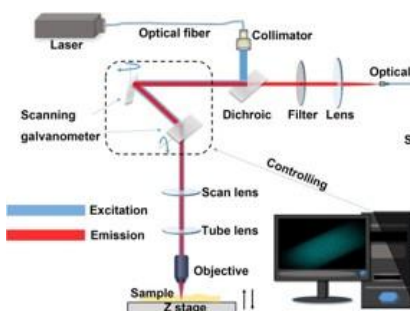
Fluorescence Lifetime Imaging Microscopy



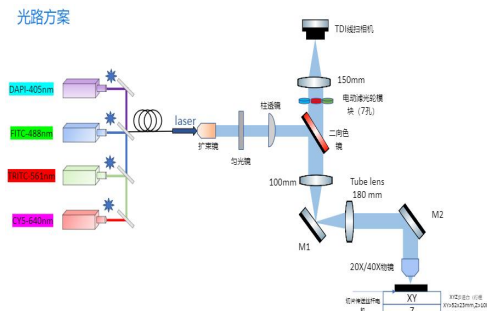
Custom Raman microscope based on Horiba



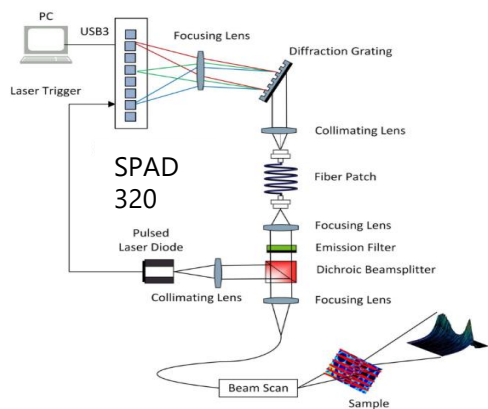
Multi Photon Microscope



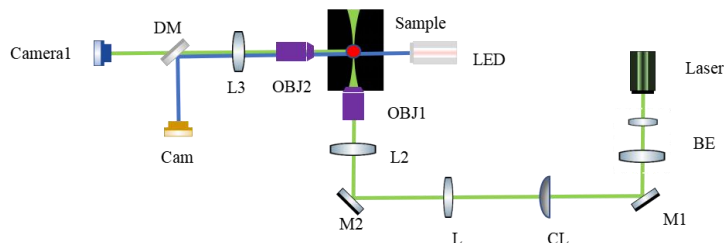
NIR Confocal Spectroscopic Microscopy (Near Infrared I/II Confocal)



Whole-slice fluorescence pathology line scanner



New Line Array SPAD Time-Gated Raman Solution



Light Sheet Microscopy

*For more application cases, please refer to the website www.simtrum.com