SIMTRUM

Product Line Card
Lasers/Light

2025 V1

For customized projects please Contact us:

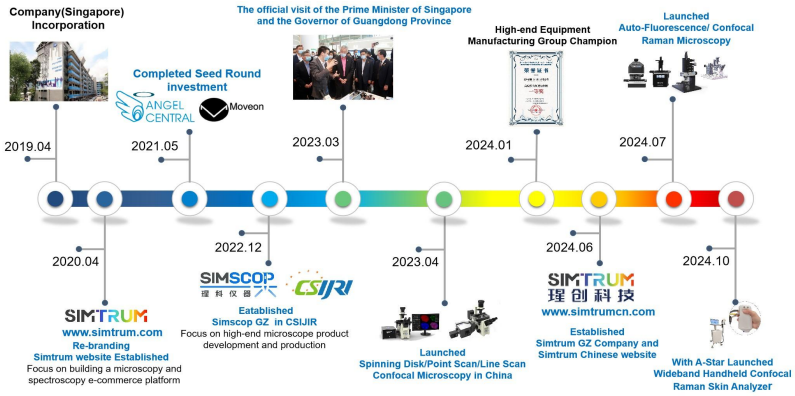
info@simtrum.com

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.

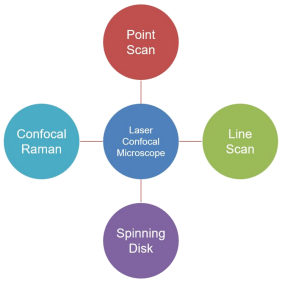


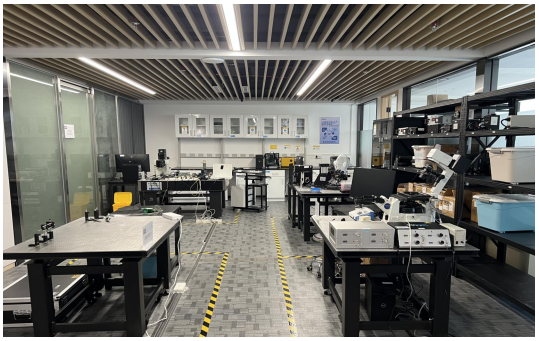
Company Milestones

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.

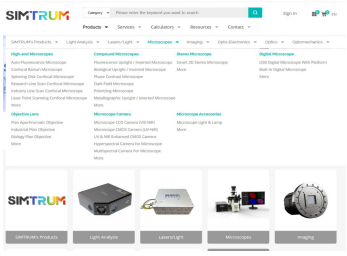
Our proprietary microscope systems include confocal laser microscopes and wide-field microscopes, along with core components such as detection modules, photomultiplier tubes (PMTs), silicon photomultipliers (SiPMs), multi-channel lasers, and motorized filter wheels. Additional products are currently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





Real scene of optical R&D laboratory

Focus on microscopy and spectroscopy e-commerce platform



E-commerce platform website:www.simtrum.com

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.

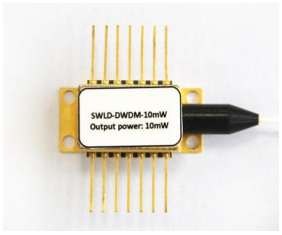
With 10 years of expertise, we support 3,000+ customers with 30+ tailored solutions.
Trust Simtrum for your microscopy and spectroscopy needs.

DPSS / Diode Lasers

CW Laser Diode Module (375-785 nm)

CW Multi-Channel Laser (405-640 nm)

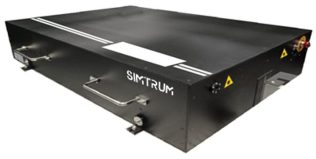
CW Narrow Linewidth Diode Lasers (532-1064 nm)



CW Pigtail Laser Diode (400-1920 nm)

DPSS Pulsed Nanosecond Lasers (266 nm-3.4 μm)

DFB/FP Pulsed Picosecond laser (370-1550 nm)



High-Power Femtosecond Solid-State Lasers

Product	Wavelength Options	Power Level	Laser Output
CW Laser Diode Module (375-785nm)	375-785 nm	10-200 mW	Free Space/ Fiber Ouput
CW Multi-Channel Laser (405-640 nm)	405-640 nm/White	10mW-1W(Customized)	Free Space/ Fiber Ouput
CW Narrow Linewidth Diode Lasers (532-1064 nm)	532-1064 nm	100-900 mW	Free Space/ Fiber Ouput
CW Pigtail Laser Diode (400-1920nm)	400-1920 nm	5mW-55W(Customized)	Fiber Ouput (SM/MM)
DPSS Pulsed Nanosecond Lasers (266 nm-3.4 μm)	266 nm/351 nm/355 nm/527 nm/ 532 nm/1064 nm/1535 nm/ 3.4 μm	25 μJ-3 mJ	Free Space/ Fiber Ouput
DFB/FP Pulsed Picosecond laser (370-1550 nm)	370-1550 nm	20-400 mW	Free Space/ Fiber Ouput
High-Power Femtosecond Solid-State Lasers	1030 nm	200 μJ- 2mJ	Fiber Ouput

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Fiber Lasers

Nanosecond Pulse Fiber Laser (1064nm-2μm)

Picosecond Pulse Fiber Laser (515nm-2μm)

Femtosecond Pulse Fiber Laser (780nm-2μm)

CW Fiber Laser System (405nm-2μm)

CW Narrow Linewidth Lasers (1530nm-2μm)

Product	Wavelength Range	Power Range	Pulse wdith
Nanosecond Pulse Fiber Laser (1064nm-2μm)	1064/1550/2000 nm	Peak Power 5W-10kW	1-250 ns
Picosecond Pulse Fiber Laser (515nm-2μm)	515-2000 nm	1mW-2W	1-100 ps
Femtosecond Pulse Fiber Laser (780nm-2μm)	780/1030/1040/1050/ 1560/2000 nm	30mW-10W	50-500 fs
CW Fiber Laser System (405nm-2μm)	405-2000 nm	5mW-30W	/
CW Narrow Linewidth Lasers (1530nm-2μm)	1530-2100 nm	20mW-1W	linewidth 3kHz/2MHz

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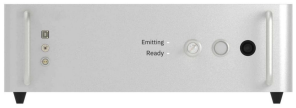
Broadband/Tunable Lasers

C-band Tunable Laser
(1529 -1567nm)

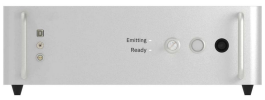
L-band Tunable Laser
(1554 -1607nm)



Supercontinuum Fiber Lasers
(450-2300nm)

Femtosecond OPA
(650 - 2600nm)

Short-pulse OPA
(650 - 2600nm)



Broadband
Femtosecond Laser
(950-1150nm)

2 μm CW Tunable Laser
(1900-2000nm)

Product	Wavelength(nm)	Type	Output Power
C-band Tunable Laser	1529~1567	CW	Up to 300mW
L-band Tunable Laser	1554~1607	CW	Up to 100mW
Supercontinuum Fiber Lasers 450-2300nm	450-2300	ps Pulse	3W Average
Femtosecond Optical Parametric Amplifier (650 - 2600nm)	650-2600	fs Pulse	40-60W
Hybrid Optical Parametric Amplifier(650 - 2600nm)	650-2600	fs Pulse	80W
Broadband Femtosecond Laser 950 -1150nm	950-1150	fs Pulse	150mW
2 μm CW Tunable Laser	1900-2050	CW	30W

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Optical Amplifiers

Erbium Doped Fiber Amplifier (EDFA)

Ytterbium Doped Fiber Amplifier (YDFA)

Thulium-Doped Fiber Amplifier (TDFA)

Semiconductor Optical Amplifier (SOA) (1060-1650nm)

Fiber Raman Amplifier

Type	Wavelength Options	Output Power
Erbium Doped Fiber Amplifier (EDFA)	1530-1565 nm	13-45 dBm
Ytterbium Doped Fiber Amplifier (YDFA)	1030-1100 nm	17-40 dBm
Thulium-Doped Fiber Amplifier (TDFA)	1920-2020 nm	20-30 dBm
Semiconductor Optical Amplifier (SOA)	1060-1650 nm	8-25 dBm
Fiber Raman Amplifier	1425-1465 nm/ 1528-1565 nm	Raman Gain10/20 dB

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Incoherent Light Sources

EUV Light Source (58-130nm)

VUV Light Source (115-400nm)

ASE Light Sources (830-2000nm)

Microscopic Imaging LED Light Sources (360-780 nm)

Collimated LED Light Sources (240-980nm)

Fiber-Coupled LED Light Sources (265-940 nm)

Infrared Sources (400-4000nm)

Lamp-Based Light Sources (185-5500 nm)

Broadband Superluminescent diodes (830-2000 nm)

IR Emitter Chip (2-14μm)

Product	Wavelength	Power Range
EUV Light Source	58-130 nm	1015 photons per second per steradian
VUV Light Source	Line Source(115-130 nm)/ Continuum Source (110-400 nm)	Line Source(0.04-3 mW/str)/ Continuum Source (0.5-9 mW/str)
ASE Light Sources	1040-2020 nm	10mW-400 mW
Microscopic Imaging LED Light Sources	Liquid Light guide (LLG) LED (360-730 nm/3000-6500 K)	0.2W-80 W
Collimated LED Light Sources	Deep UV (240-340 nm)/ High Power (365-980 nm)	Deep UV (15mW-200mW) / High Power (100mW-10W)
Fiber-Coupled LED Light Sources	255-980 nm/ 3000K-6500K	80 μW-40mW/ 5.6 mW-2800 mW
Infrared Sources	NIR(400-4000 nm)/ MIR(1-25 μm)	360mW/ 180mW
Lamp-Based Light Sources	185-5500 nm	1.7mW-30W
Broadband Superluminescent diodes	830-2000 nm	10mW
IR Emitter Chip	2-14 μm	/

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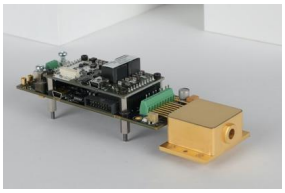
Quantum Cascade Lasers

Terahertz Quantum Cascade Lasers (1-4.5THz)

CW IR Quantum Cascade Lasers (3-12μm)



CW LWIR Quantum Cascade Lasers (4-17μm)

Product	Wavelength	Output Power
Terahertz Quantum Cascade Lasers(1-4.5THz)	1-4.5 THz	1-5mW/10-20mW
CW IR Quantum Cascade Lasers(3-12μm)	3-12μm	1-50mW
CW LWIR Quantum Cascade Lasers(4-17μm)	4-17μm	1-1500mW

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