

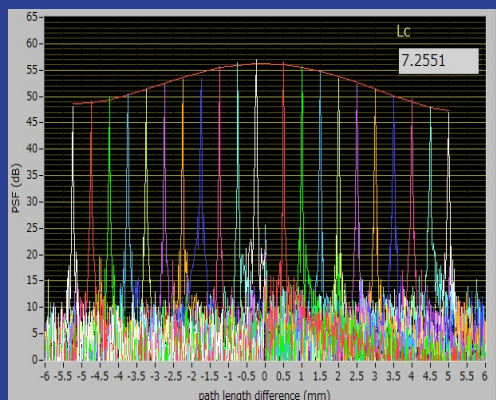
200kHz Swept Light Source

200kHz Swept Light Source for OCT Imaging

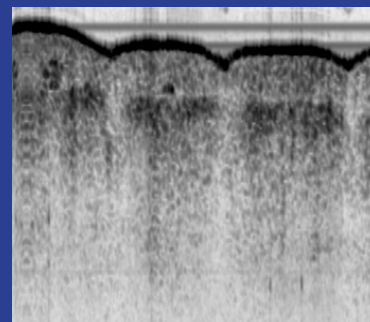
*Mechanical - free ,
full electric controlled swept light source is now available !!*

Highlights

- High-speed :
200kHz A-line repetition rate
- Voltage-controlled sweeping formats :
k-linear scan available
- Coherence length :
> 7mm at 200kHz Scan
- All solid state :
no moving parts



Point Spread Function



OCT image*

*Cross section of human thumb skin(1.5mm×1.5mm)

Swept light source is based on the results of NTT Photonics Laboratories

NTT Advanced Technology Corporation

200kHz Swept Light Source

■ Specifications

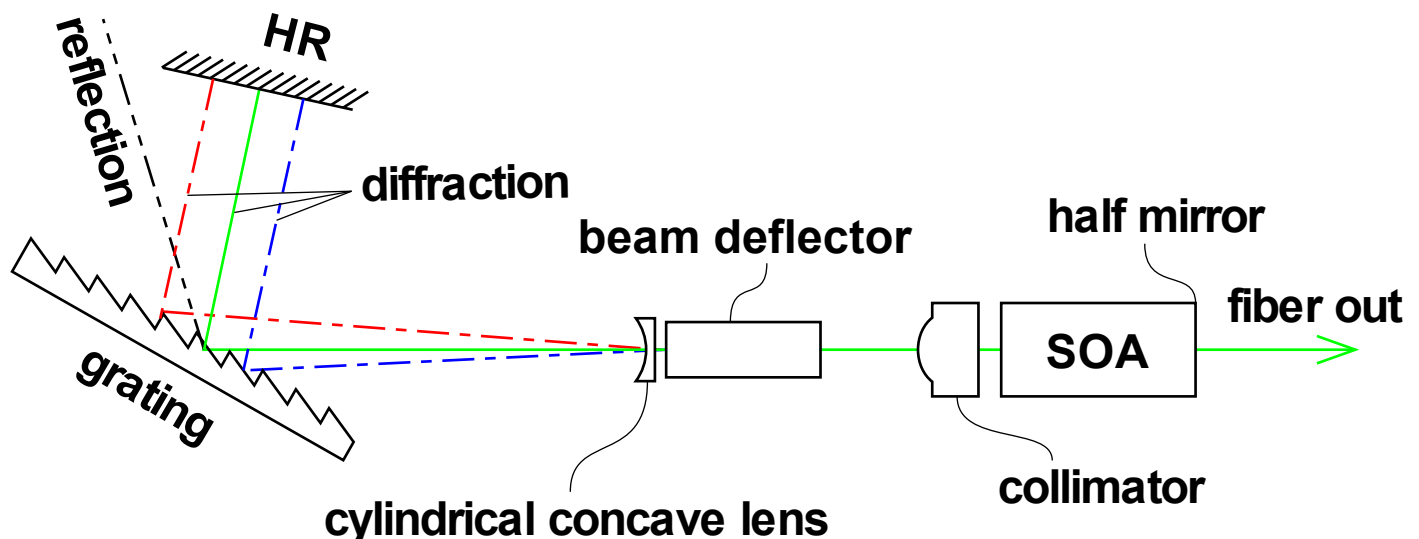
Parameter	min.	max.	units
Center wavelength	1310	1330	nm
Wavelength span	100		nm
Average output (main)	17		mW
Average output (monitor)	0.17		mW
Coherence length*1	> 7		mm
Sweep trigger level	TTL		
Laser drive	Sine or Sawtooth*2		
Duty of sawtooth scan	50	70	%
Line voltage*3	100	240	V
Mechanical dimensions	250×300×150 (excluding protrusions)		mm
Interface to PC	USB-B		
Output connector (main/monitor)	FC / APC		
Sweep trigger connector	BNC		
Interference signal connector	BNC		
Control program	LabVIEW runtime		
Operating system	Windows7 32bit		
Operating temperature	10 ~ 30°C , no condensation		

*1 Defined as the FWHM of the interference signal as the function of path difference.

*2 Two driving mode is selected via the control software.

*3 The power supply to the swept light source box is 48V DC. The AC/DC converter is placed out of the box.

■ Configuration of KTN based swept light source



Features and specification are subject to change for improvement without notice.
For more information, please visit <http://www.ntt-at.com/>

NTT Advanced Technology Corporation

International Business Division

TEL: +81-44-589-5894 Fax: +81-44-541-1326

E-mail: ktn@ml.ntt-at.co.jp web: <http://www.ntt-at.com/>