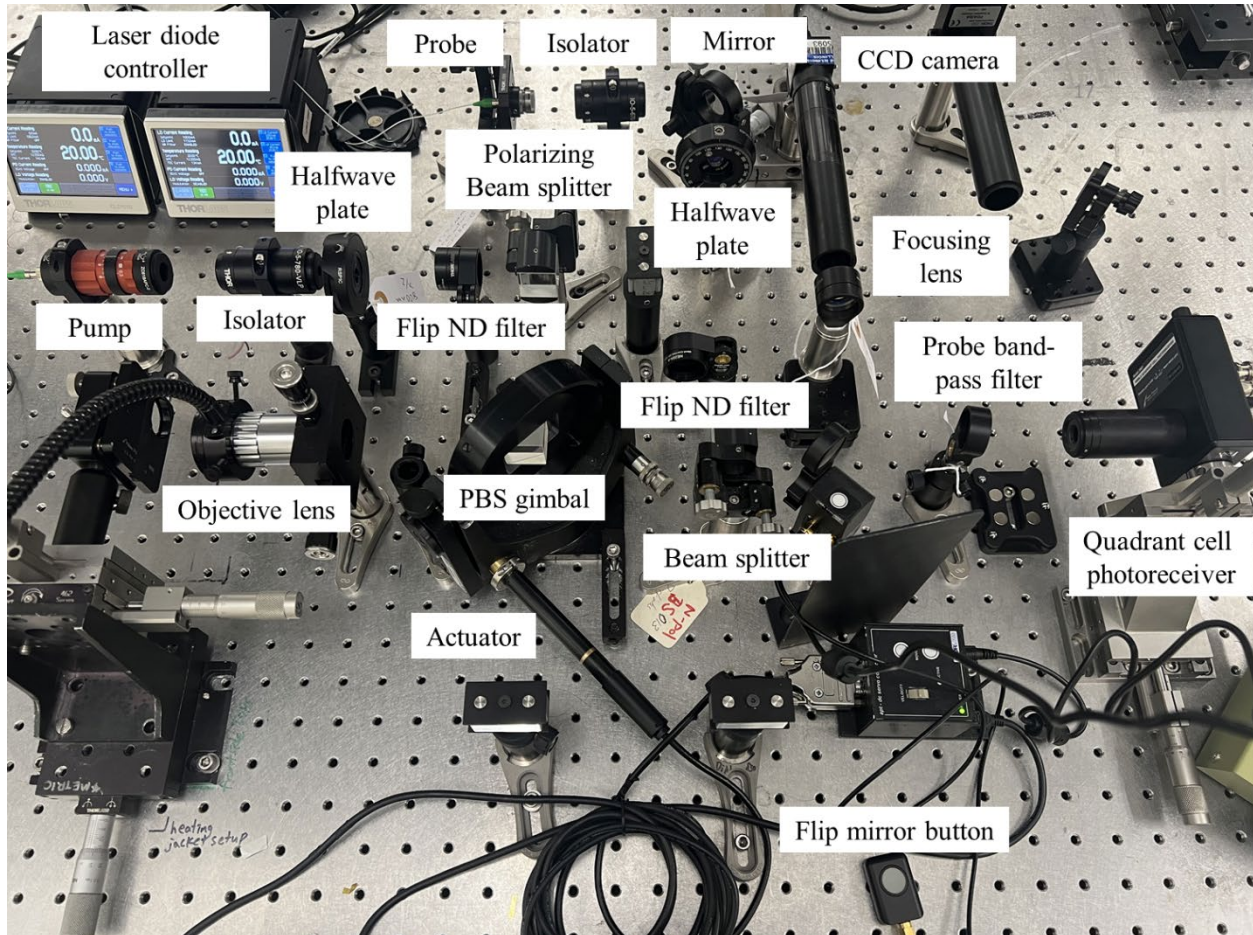


TOPS Shopping list



TOPS system setup

1. Pump superluminescent diode

Company / model: Superlum / S780.14.10P

Spec: wavelength:780 nm, spectrum width:14 nm, output power 10, with PM Fiber

URL: [Superlum | Products | Superluminescent Diodes \(superlumdiodes.com\)](http://www.superlumdiodes.com/Products/Superluminescent-Diodes)

Price / Unit: \$ 1,270 / 1

2. Probe superluminescent diode

Company / model: Superlum / S670.8.5P

Spec: wavelength:670 nm, spectrum width:8 nm, output power 5, with PM Fiber

URL: [Superlum | Products | Superluminescent Diodes \(superlumdiodes.com\)](http://Superlum | Products | Superluminescent Diodes (superlumdiodes.com))

Price / Unit: \$ 1,600 / 1

3. Laser diode controller

Company / model: Thorlabs / CLD1015

URL: Thorlabs - CLD1015 Compact LD and Temperature Controller with Mount

Price / Unit: \$ 2,600 / 1, Quantity: 2 units

4. Adjustable fiber collimator for pump and probe

Company / model: Thorlabs / CFC8A-B

Spec: $f=7.5$ mm, 650-1050 nm

URL: [FC/APC Adjustable Aspheric Collimators \(thorlabs.com\)](http://FC/APC Adjustable Aspheric Collimators (thorlabs.com))

Price / Unit: \$ 368 / 1, Quantity: 2 units

Adapter / mount / spacer / post: AD15F2 (Thorlabs) / KE100T (Thorlabs) / Setscrew 8-32 / RS3.5P8E (Thorlabs)

5. Isolator for pump

Company / model: Thorlabs / IO-5-780-VLP

Spec: 760-800 nm, Transmission 85%

URL: Thorlabs - IO-5-780-VLP Free-Space Isolator, 780 nm, Ø4.7 mm Max Beam, 1.7 W Max

Price / Unit: \$ 1,275 / 1

Post / spacer / post holder: TR2(Thorlabs) / Setscrew 8-32 / PH2.5 (Thorlabs)

6. Isolator for probe

Company / model: Thorlabs / IO-5-670-VLP

Spec: 650-690 nm, Transmission 75%

URL: [Thorlabs - IO-5-670-VLP Free-Space Isolator, 670 nm, Ø4.7 mm Max Beam, 1.7 W Max](#)

Price / Unit: \$ 1,428 / 1

Post / spacer / post holder: TR2(Thorlabs) / Setscrew 8-32 / PH2.5 (Thorlabs)

7. Mirror for probe

Company / model: Thorlabs / PF10-03-P01 - Ø1"

Spec: Ø1" protected silver mirror

URL: [Thorlabs - PF10-03-P01 Ø1" Protected Silver Mirror](#)

Price / Unit: \$ 56.26 / 1

Mount / spacer / post: KE100CP (Thorlabs), Setscrew 8-32, RS3P8E (Thorlabs)

8. Halfwave plate for pump

Company / model: Thorlabs / WPH05M-780

Spec: 780 nm, Ø1/2" Zero-Order Half-wave plate, Ø1" Mount

URL: [Thorlabs - WPH05M-780 Ø1/2" Zero-Order Half-Wave Plate, Ø1" Mount, 780 nm](#)

Price / Unit: \$ 507 / 1

Mount / spacer / post / post holder: RSP1X225 (Thorlabs) / Setscrew 8-32 / TR2(Thorlabs) / PH2.5 (Thorlabs)

9. Halfwave plate for probe

Company / model: Thorlabs / WPH05M-670

Spec: 670 nm, Ø1/2" Zero-Order Half-wave plate, Ø1" Mount

URL: [Thorlabs - WPH05M-670 Ø1/2" Zero-Order Half-Wave Plate, Ø1" Mount, 670 nm](#)

Price / Unit: \$ 507 / 1

Mount / spacer / post / post holder: RSP1X225 (Thorlabs) / Setscrew 8-32 / TR2(Thorlabs) / PH2.5 (Thorlabs)

10. ND filter for pump

Company / model: Thorlabs / NE04A-A, NE03A-A

Spec: ARC 350-700 nm, OD: 4.0, 3.0

URL: [Thorlabs - NE04A-A Ø25 mm Absorptive Neutral Density Filter, SM1-Threaded Mount, ARC: 350-700 nm, OD: 0.4](#)

URL: [Thorlabs - NE03A-A Ø25 mm Absorptive Neutral Density Filter, SM1-Threaded Mount, ARC: 350-700 nm, OD: 0.3](#)

Price / Unit: NE04A-A (\$ 86.75 / 1), NE03A-A (\$ 89.96 / 1)

Mount / spacer / post / post holder: TRF90 (Thorlabs) / Setscrew 8-32 / TR1.5 (Thorlabs) / PH2 (Thorlabs)

11. ND filter for probe

Company / model: Thorlabs / NE20A-A

Spec: ARC350-700 nm OD: 2.0

URL: [Thorlabs - NE20A-A Ø25 mm Absorptive Neutral Density Filter, SM1-Threaded Mount, ARC: 350-700 nm, OD: 2.0](#)

Price / Unit: \$ 89.96 / 1

Mount / spacer / post / post holder: TRF90 (Thorlabs) / Setscrew 8-32 / TR1.5 (Thorlabs) / PH2 (Thorlabs)

12. PBS gimbal optical mount

PBD / Gimbal mount / Linear actuator / Power supply: PBS251(Thorlabs) / SL8ABD (Newport) / CONEX-TRA25CC (Newport) / CONEX-PS (Newport)

URL: [Thorlabs - PBS252 1" Polarizing Beamsplitter Cube, 620 - 1000 nm](#)

URL: [SL8ABD Gimbal Optical Mount \(newport.com\)](#)

URL: [CONEX-TRA25CC Linear Actuator \(newport.com\)](#)

URL: [CONEX-PS Power Supply \(newport.com\)](#)

Price / Unit: PBS252 (\$ 259 / 1), SL8ABD (\$ 3,098 / 1), CONEX-TRA25CC (\$ 1,737 / 1), CONEX-PS (\$ 131 / 1)

Note: It is necessary to have a custom BS mount to install the PBS in the gimbal mount.

13. PBS for pump

Company / model: Thorlabs / PBS252

Spec: 1" polarizing beam splitter cube, 620 – 1000 nm

Adapter / mount / spacer / post: / UPA-CH1 (Newport) / U100-A2K (Newport) / Setscrew 8-32, PS-3 (Newport)

14. BS for probe

Company / model: Thorlabs / BS013

Spec: 50:50 Non-polarizing beam splitter cube, 400 – 700 nm, 1"

Price / Unit: 1,380 / 1

18. CCD camera

Company / model: Thorlabs / CS235MU

Spec: Kiralux 2.3 MP Monochrome CMOS Camera

URL: [Thorlabs - CS235MU Kiralux 2.3 MP Monochrome CMOS Camera, USB 3.0 Interface](#)

Price / Unit: \$ 2,030 / 1

Lens tube/ post / spacer / stage: SM1L20 (Thorlabs) / PS-2.5 (Newport) / Screw 1/4"-20 / UMR8.51 (Newport) / BM17.51 (Newport)

19. Focusing lens for CCD camera

Company / model: Thorlabs / AC254-200-B-ML

Spec: $f=200$ mm, ARC: 650-1050 nm

URL: [Thorlabs - AC254-200-B-ML \$f=200\$ mm, \$\varnothing 1\$ " Achromatic Doublet, SM1-Threaded Mount, ARC: 650-1050 nm](#)

Price / Unit: \$ 131.87 / 1

Mount/ spacer / post: LMR1 (Thorlabs) / Screw 8-32 / RS3P8E (Thorlabs)

20. Motorized filter flip mount

Company / model: Thorlabs / MFF101

URL: [Thorlabs - MFF101/M Motorized Filter Flip Mount with \$\varnothing 1\$ " Optic Holder, M4 Tap](#)

Mirror / Post: PF10-03-P01- $\varnothing 1$ " / PS-2 (Newport)

21. Probe band-pass filter

Company / model: IDEX Health & Science / FL-004426

URL: [FF01-673/11-25 \(idex-hs.com\)](https://www.idex-hs.com/FF01-673/11-25)

Price / Unit: \$ 375 / 1

Mount / spacer / post / post holder: TRF90 (Thorlabs) / Setscrew 8-32 / TR1.5 (Thorlabs) / PH2 (Thorlabs)

22. Function generator

Company / model: B&K Precision / Model 4053B

Spec: 10 MHz Dual Channel Function / Arbitrary Waveform Generator

URL: [B&K Precision Corporation \(bkprecision.com\)](https://www.bkprecision.com)

Price / Unit: \$ 799 / 1

23. Lock-in amplifier

Company / model: Stanford research system / SR860

Spec: 1mHz to 500 kHz

URL: [Lock In Amplifier - SR860 \(thinksrs.com\)](https://www.thinksrs.com/Lock-In-Amplifier-SR860)

Price / Unit: \$ 6,495 / 1

Option (Function generator + Lock-in amplifier)

Company / model: Liquid Instruments / Moku:Go

Spec: 10 input/output channels, Function Generator, 2.5 MSa/s sampling rate

URL: [Moku:Go with 14 Integrated Instruments - Liquid Instruments](https://www.liquidinstruments.com/moku-go-with-14-integrated-instruments)

Price / Unit: \$ 799 / 1, Quantity: 2 units

24. 4-way BNC Manual data switch

Company / model: CABLE LEADER / BN501-0004

URL: [Amazon.com: Monoprice 101376 BNC ABCD 4 Position Switch Box : Electronics](#)

Price / Unit: \$ 14.33 / 1

25. Optical power meter

Company / model: Newport / 843-R, 818SL/DB

URL: [843-R Optical power meter \(newport.com\)](#)

URL: [818-SL/DB Optical Power Detector \(newport.com\)](#)

Price / Unit: 843-R (\$ 1,035 / 1), 818SL/DB (\$ 642 / 1)

26. Multimeter

Company / model: B&K Precision / 5493C

URL: [5493C B&K Precision | Test and Measurement | DigiKey](#)

Price / Unit: \$ 1,095 / 1