(https://phluxi.com/en/)

Laser

Diode-Pump Nd:YAG Laser

Our THz-wave parametric systems is driven by a diode-pumped laser. This Nd:YAG laser is developed as a pump source for THz systems but it also applicable a wide range of applications. QCW-pumping results high energy pulses whereas the laser is pumped by laser diodes.

Specifications

- QCW-LD pumped Nd:YAG laser
- Emission wavelength: 1064 nm
- Repetition rate: Single shot ~ 100 Hz
- Pulse energy: 20 mJ maximum
- Pulse width: 15 ns typ. (Q-sw mode)
- Head dimensions: 350 x 180 x 160 mm, 8 kg

Diode controller and Chiller are included.

Solid-state Laser Amplifier Module

General use solid-state laser amplifier module with pumping diode, laser rod, and temperature sensors.

They are side-pumped laser core packaged with laser diodes, laser rod, and temperature sensors. They can be used as the laser engine of customer-built laser and the amplifier of existing system. Standard item includes Nd:YAG laser rod and pump diodes for excitation of Nd ions.

QCW model (type 1/type 2)

- LD package: CS or G-package
- Number of diodes: 3
- Applicable rod dimensions: 2~3.5 mm-dia (type1), 5.5~4 mm-dia (type2), >65 mm-long
- Water-cooled

CW model

- LD package: CS or G-package
- Number of diodes: 3
- Applicable rod dimensions: 2~3.5 mm-dia, >60 mm-long
- Water-cooled

Ask availability for other material and customized specifications.

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New product – Laser Inline Monitoring Post (https://phluxi.com/en/2018/08/24/new-product-laser-inline-monitoring-post/)

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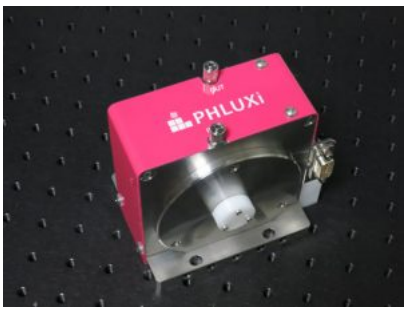


Eletctonically-Tunable Laser

An intracavity defractive tunable filter which is driven by RF signal (Acousto-optic tunable filter: AOTF) is inserted into the laser cavity of tunable laser. Monochromatic laser comes from the laser cavity which constructed for the defracted emission selected by the AOTF. The laser has many advantages; stable, fast scan, quick access, and fluorescence free.

- No mechanical movement of tuning element brings high stability.
- The transition time between two wavelength depends on AOTF, it would be less than 1 us for any interval.
- Easy rejection of background fluorescence (spontaneous emission) from laser medium.
- PC, smartphone, and handset can be used to control wavelength.

Ti:sapphire

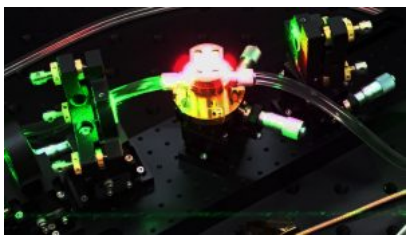
Applying 10 W CW laser at 532 nm as a pump laser to Ti:sapphire, typical specifications are as follows.

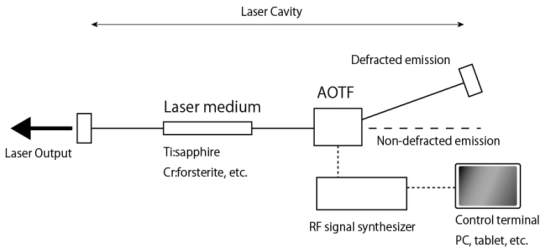
- Maximum averaged power: 1 W (at~800 nm)
- Wavelength range: 740~920 nm
- Line width: <0.5 nm
- Transition time: <1 us (between any two wavelength)

Other tunable laser

Other material can be applied. Below is few examples of material. Required pump laser and achievable specifications depend on laser medium.

- Forsterite (Cr:Mg2SiO4): wavelength range 1180~1320 nm
- Cr:ZnSe: wavelength range 2350~2950 nm
- Yb fiber: wavelength range 1030~1100 nm





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