

PT501 SERIES



PT501 series laser systems integrate a picosecond optical parametric oscillator (OPO) and a pump laser in a single compact housing. Mounting the components on the same frame provides a robust solution. It makes laser installation shorter, improves long-term stability, and reduces maintenance costs.

Fast and fully automatic wavelength tuning is achieved by advanced microprocessor control. The wavelength tuning elements are mounted on precise closed-loop

micro-stepping motors. The temperatures of the nonlinear crystals are controlled by precise thermo-controllers. No additional manual adjustment of the laser system is needed.

For customer convenience the system can be controlled by a keypad and/or any controller running on any OS using REST API commands. Variety of interfaces USB, RS232, LAN, WLAN (optionally) ensures easy control and integration with other equipment.

Single Housing Mid-Infrared Tunable Picosecond Laser System

FEATURES

- ▶ **Tuning range 2300 – 16000 nm (4345 – 625 cm⁻¹)**
- ▶ **Hands-free tuning:** motorized for the entire tuning range
- ▶ **Linewidth <4 cm⁻¹** in the entire tuning range
- ▶ **Repetition rate 100 Hz**
- ▶ **Air cooled** – external water supply is not required
- ▶ **Beam direction stability** in the entire tuning range
- ▶ **Single housing:** integrates a pump laser and OPO in a single housing
- ▶ **PC control via USB (virtual COM port), RS232, LAN using REST API commands**

APPLICATIONS

- ▶ **Infrared spectroscopy**
- ▶ **SFG (sum frequency generation spectroscopy)**

PT501 series features

Model	Features
PT501	provides a narrowband radiation with a linewidth <4 cm ⁻¹ in the entire tuning range: 2300 – 16000 nm (4345 – 625 cm ⁻¹). Repetition rate 100 Hz.