

Preliminary

Single Housing  
Mid-Infrared  
Tunable Picosecond  
Laser System

# 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.

## FEATURES

- ▶ *Tuning range 2300 – 16000 nm (4345 – 625 cm<sup>-1</sup>)*
- ▶ *Hands-free tuning: motorized for the entire tuning range*
- ▶ *Linewidth <4 cm<sup>-1</sup> 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 <b>narrowband radiation</b> with a linewidth <4 cm <sup>-1</sup> in the entire tuning range: 2300 – 16000 nm (4345 – 625 cm <sup>-1</sup> ). Repetition rate 100 Hz.

**PHOTO  
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