

Covering the 900nm region with wide mode-hop-free tuning TOPTICA's continuously tunable lasers are now available for this important wavelength range

The *CTL* product series by TOPTICA Photonics is characterized by its wide mode-hop-free tuning of up to 120 nm and its high resolution down to the kHz level. The latest addition to this family, *CTL 900*, is tunable between 880nm and 950nm. It enables new applications with quantum dots, in nano photonics and spectroscopy.

Lasers of TOPTICA's *CTL* product family are made to be ideal tools for exciting micro-cavities or quantum dots, for pumping micro combs, as well as for component testing and spectroscopy. Their most important property is providing wide and continuous tunability without any mode-hops. They have high power, a narrow linewidth and low drift. Scans can be performed with highest resolution. This unique combination of features makes them outstanding in their field and enables researchers to perform measurements at the quantum limit.

Mode-hops are prevented by an innovative opto-mechanical design (patent US9960569B2) together with an active feedback loop called SMILE (Single Mode Intelligent Loop Engine) that keeps the laser on the same mode at all times. With the fully digital, low noise and drift DLC pro controller, the CTL laser is easy to use and operate via touch-screen and knobs as well as remotely via PC GUI and command language (Python SDK). A test system mode can characterize components or record spectra.

A new family member: CTL 900

The latest addition to this family is called CTL 900. It is tunable between 880nm and 950nm. The long-awaited wavelength range is especially useful for resonantly exciting quantum dots, for spectroscopy or addressing e.g. rare earth ions or the Caesium D1 line.

The production has already started and the first devices are performing to set a new standard in the lab. Please contact us to apply for a CTL 900 for your application. We are starting cooperations to enable pioneering science in this wavelength range.

Measurements at the quantum limit

- Wide mode-hop-free tuning (up to 120 nm)
- Available at wavelengths between 880 nm and 1630 nm
- High resolution (down to kHz level)
- Perform measurements at the (quantum) limit with low noise & drift (linewidth < 10 kHz)
- User friendly control panel and remote control



Perform measurements at the (quantum) limit with our CTL product series of widely tunable mode-hop-free lasers. Now also in the 900nm range.

Key Applications:

- Micro-Cavities and pumping micro combs
- Quantum Dots
- Component Testing
- Spectroscopy

For details and help please get in touch:

www.toptica.com/continuous

TOPTICA Photonics AG

Lochhamer Schlag 19
82166 Graefelfing, Germany
www.toptica.com

Press Contact

Mr. Jan Brubacher
Phone + 49 89 85837-123
jan.brubacher@toptica.com

TOPTICA has been developing and manufacturing high-end laser systems for scientific and industrial applications for 20 years. Our portfolio includes diode lasers, ultrafast fiber lasers, terahertz systems and frequency combs. The systems are used for demanding applications in biophotonics, industrial metrology and quantum technology. TOPTICA is renowned for providing the widest wavelength coverage of diode lasers on the market, providing high-power lasers even at exotic wavelengths. Today, TOPTICA employs 340 people worldwide in six business units (TOPTICA Photonics AG, TOPTICA eagleyard, TOPTICA Projects GmbH, TOPTICA Photonics Inc. USA, TOPTICA Photonics K.K. Japan, and TOPTICA Photonics China) with a consolidated group turnover of € 76 million.