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## Press Release

### PRODUCT LAUNCH

NEW: Miniature external cavity laser (Mini-ECL) with 200 kHz linewidth and SM Laser Diode with 400 mW fiber output @ 808nm - both in standard butterfly package

**Berlin/Munich, Germany, April 13th, 2022** TOPTICA eagleyard continues its ambitious innovation path with the launch of two highly innovative laser diodes – counting launch #3 and #4 in 2022

At this year's LASER World of PHOTONICS taking place in Munich, Germany from April 26<sup>th</sup> - 29<sup>th</sup> TOPTICA eagleyard will introduce the Mini-ECL @ 780 nm and the SM Laser Diode with 400 mW fiber output @ 808 nm – both in standard butterfly platform. These two new products are part of the innovation path of the company as they are launched just shortly after the highly appreciated  $\mu$ MOPA and the tapered amplifier in standard butterfly package. Both products were presented in January 2022 with the  $\mu$ MOPA even being nominated as SPIE Prism award finalist.

All four new products unite the high integration - comprising many features in a robust butterfly package that brings along various advantages.

The *Mini-ECL* is a single frequency laser diode with a super fine linewidth of typical 200 kHz. A stable performance is ensured by the integrated cavity in the hermetically sealed butterfly package. Moreover, wavelengths between 650 – 1100 nm are customizable upon request, opening more freedom across the spectrum. The standard product at 780 nm will mainly be used for spectroscopy (Rb D2 line), metrology and atomic clocks.



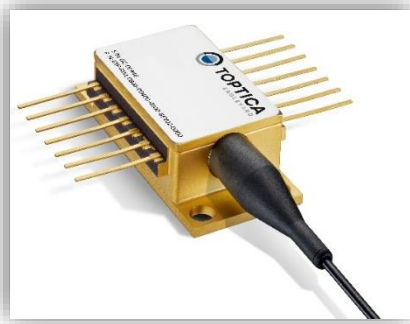
**Product Highlights:**

- 80 mW @ 780 nm
- Small linewidth of typ. 200 kHz
- Very good SMSR (typ. 50 dB)
- Integrated beam collimation
- Thermal management by integrated thermoelectric cooler and thermistor

The advantages of the Mini-ECL become very obvious when looking at the reduced complexity based on the integration of the cavity. Due to the ease of use, the robustness of the package and therefore scalability, not only research applications will benefit from this innovation but commercial and industry requirements are more easily fulfilled than with already available solutions. This will lead to outstanding results and applications along the value chain.

The new *400 mW SM Laser Diode* benefits from all mentioned advantages of the hermetically sealed butterfly packages as well. With its introduction, TOPTICA eagleyard highlights again its thrive for innovation as this unique product is the first single mode laser diode with a 400 mW output power from fiber at a wavelengths of 808 nm on the market. It is focused on power delivery with a center wavelength around the absorption peak 808 nm (a tighter tolerance can be achieved with FBG upon request). A brilliant polarization is achievable for higher efficiency.

The 400 mW SM Laser Diode will mainly be used as pump for fiber lasers, for optical tweezers and in optical communication.



#### Product Highlights

- 400 mW single mode output ex-fiber @ 808 nm
- CW operation
- PM fiber output, plug and play with fiber pigtail
- Thermal management by integrated thermoelectric cooler and thermistor

Four new products being launched within four months are not the only news from TOPTICA eagleyard: The company will present a new, modern logo at the LASER World of PHOTONICS along with several surprises at their booth #B5.331.

#### **About TOPTICA eagleyard:**

TOPTICA eagleyard's core competence is the development, production and sale of innovative high-power laser diodes based on GaAs (Gallium Arsenide). Its portfolio contains laser diodes with wavelengths ranging from 630 nm to 1120 nm sorted in five product families: Single Mode Laser Diodes, Single Frequency Laser Diodes, Multimode Laser Diodes, Tapered Amplifiers and Gain Chips. These laser diodes are addressing a variety of applications such as space, aerospace and defense, metrology, spectroscopy, medical instrumentation, test & measurement and material analysis. The company started as a rapidly growing spin-off from the Ferdinand-Braun Institut in 2002 and is part of the Munich-based TOPTICA Group since 2013.

For more information, please visit our website: <https://www.toptica-eagleyard.com>