Press Release



TRUMPF to present 980nm VCSEL for long reach at OFC 2024

TRUMPF's 980nm VCSEL extends transmission reach to 500 meters using optimized multimode fiber

Ulm/San Diego, March 26, 2024 – TRUMPF Photonic Components, a global leader in VCSEL and photodiode solutions for data communication, announces transmission reach extended to 500 meters with its 980nm VCSEL and a multimode fiber optimized for this wavelength. The results will be presented in more detail by Jochen Hellmig, Head of Technology & Application Development at TRUMPF Photonic Components, during his presentation at Optical Fiber Conference (OFC) in San Diego, CA. TRUMPF continues to make progress towards its long wavelength VCSELs and photodiodes for applications requiring expanded specs for wider temperature range and enhanced reliability.

"As a pure-play supplier of VCSEL and photodiodes, we are partnering with customers to develop long-wavelength solutions that address applications such as automotive in addition to traditional data center," said Ralph Gudde, Vice President of Marketing and Sales at TRUMPF Photonic Components. "With our strong financial background and German origin, we are safe and attractive partners for our customers to collaborate with in these new applications" he added. TRUMPF continues to invest heavily in its technology for 100Gbps and beyond. With state-of-the-art fabs in Germany and Taiwan, TRUMPF offers a more dependable supply chain to serve global demands.

Advanced optical data communication systems benefit from the high-speed data transmission which the VCSEL-based technology offers. TRUMPF is offering both VCSELs and photodiodes as a matching pair solution, in singlets, 1x4 arrays and 1x12 arrays for 14G and 25G for the NRZ applications. The same is offered for 56G PAM4 applications. The VCSELs are specifically designed to meet the demands of data centers including for Al/ML, high-performance computing, and other bandwidth-intensive applications, as they deliver stable and reliable data transmission at high speeds.

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Visit TRUMPF Photonic Components at OFC 2024, Booth 2000

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Picture 1: Datacom VCSEL

TRUMPF offers VCSEL for long wavelengths. © TRUMPF



Picture 2: Dr. Jochen Hellmig, Head of Technology & Application Development at TRUMPF Photonic Components © TRUMPF

About TRUMPF Photonic Components

TRUMPF Photonic Components is a global technology leader, supplying VCSEL and photodiode solutions for consumer electronics, datacom, industrial sensing and heating markets. More than two billion VCSEL chips and photodiodes have been shipped worldwide so far. The employees continue to drive the technological know-how established for over 20 years now in order to maintain its leadership position. The long-established technology was acquired by TRUMPF in 2019. The company has its headquarters in Ulm, Germany, with further sales locations in the Netherlands, China, Korea and the US.

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TRUMPF Photonic Components belongs to the TRUMPF Group, a high-technology company that offers production solutions in the machine tool and laser sectors. TRUMPF is the world technological and market leader for machine tools used in flexible sheet metal processing, and also for industrial lasers and metal 3D printing. In 2022/23, the company employed some 18,400 people and generated sales of about 5.4 billion euros. With over 80 companies, the TRUMPF Group is represented in nearly every European country as well as in North America, South America and Asia. The company has production facilities in Germany, France, the United Kingdom, Italy, Austria, Switzerland, Poland, the Czech Republic, the United States, Mexico and China.

For more information about TRUMPF Photonic Components visit: www.trumpf.com/s/VCSEL-solutions

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