



## **Vertilas InP VCSEL product portfolio presented at CIOE 2024 in Shenzhen, China**

10 September 2024, [Shenzhen, China]

Vertilas GmbH invites you to join our team at Booth 4D021+4D022 during the China International Optoelectronic Exposition (CIOE) 2024 in Shenzhen on 11-13 September 2024. Vertilas will showcase its technological advancement of InP based NIR VCSEL for optical communications, 3D sensing, gas sensing (TDLS) and customer-specific applications.

Christian Neumeyr, CEO of Vertilas, “We are excited to demonstrate our technology and product portfolio at CIOE 2024. Our product lineup includes our novel 2D VCSEL arrays and a live demo of TrieEye’s SWIR illuminator and camera solution based on our 1.3  $\mu\text{m}$  2D VCSEL arrays”.

For optical communications, the booth will provide a glimpse of the industry’s first 106 Gbps 1310 nm single-mode VCSEL technology with capabilities up to 1.6 Gbps. It sets new standards for low power consumption in optical engines and modules, with up to 80% reduction in power on the transmit optics compared to conventional solutions.

Also, Vertilas introduces its 1.3  $\mu\text{m}$  2D VCSEL array for 3D sensing solutions that provides high output power with high power efficiency. This new long wavelength VCSEL array technology enhances the functionality of various applications such as SWIR cameras. The 1.3  $\mu\text{m}$  2D VCSEL array enables greatly improved eye safety and signal quality while minimizing sunlight distortion. Vertilas InP VCSEL array technology also offers wavelengths at 1.55  $\mu\text{m}$  up to 2  $\mu\text{m}$ . This new technology is expected to broaden the scope of applications in imaging and illumination across multiple industries, including automotive, consumer, biometrics, and mobile robotics. **Visit our booth for a live demonstration of a SWIR illumination solution from Trieeye.**

For spectroscopy and gas sensing solutions, Vertilas will showcase NIR VCSELs from 1.3  $\mu\text{m}$  up to 2.3  $\mu\text{m}$  to detect a wide range of gases, such as H<sub>2</sub>O, HF, NH<sub>3</sub>, CH<sub>4</sub>, CO, CO<sub>2</sub> and HCl. The high performance Vertilas laser products enable customers to design and manufacture spectroscopy solutions that offer high sensitivity, low power dissipation,

small system size and cost effective manufacturing.

Vertilas GmbH is a leading global provider of long wavelength Vertical Cavity Surface Emitting Laser diodes (VCSEL) for optical communications, gas sensing (TDLS), 3D sensing and customer-specific applications. VERTILAS® unique Indium Phosphide (InP) VCSEL technology offers a wavelength range of 1.3  $\mu\text{m}$  to 2.3  $\mu\text{m}$  and has been proven for 20 years in a variety of demanding markets.

Christian Neumeyr, CEO

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