

First choice for biotechnological applications: Omicron announces the diode laser of the future with "BluePhoton 488"

With the innovative 488 nm diodes, Omicron Laserage Laserprodukte GmbH from Rodgau has developed a new generation of unique diode lasers, which have never been seen before.

Rodgau/Frankfurt (mas) - With the product announcement of the new diode laser series "BluePhoton 488", Omicron is setting trends in the 488 nm wave length. Particularly for biotechnological applications, the new product family of the laser specialist is the first choice. In comparison with traditional argon gas lasers and DPSS lasers, the "BluePhoton 488" offers numerous advantages: Through the extremely fast direct analog modulation capability up to 350 MHz, there is no longer any need to use opto-acoustic modulators. As a result, the Omicron diode lasers with 488 nm diodes are smaller and more cost-effective. In addition, with a power of 20 mW, they are characterized by improved efficiency in power consumption and have a longer life time. A significant feature of the Omicron diode laser in the new wave length is the system operational-readiness in less than two minutes. Furthermore, the astigmatism is compensated by the use of the innovative Omicron optics. This archives not only a round beam with a diameter of approximately one millimeter $1/e^2$ but also an absolutely round focus.

The use of typical laser components from Omicron products together with the 488nm wavelength produces sensational new possibilities. In combination with the spectacular "Deepstar" from Omicron, a diode laser with almost infinite modulation depth, the use of 488 nm diodes produces unrivalled results. In the Deepstar version, the "BluePhoton 488" indicates a bright/dark ratio of more than 2.5 million to one in the modulation state.

Due to an excellent temperature stability of 0.01° K and the use of the Omicron high-precision electronics, the "BluePhoton 488" gives a convincing performance with an extreme noise reduction of less than 0.1 percent (RMS) and a power fluctuation of less than 0.5 percent over 48 hours.

The modular principle of the laser heads of the LDM series also offers further possibilities for customer-specific adaptation, such as single-mode fiber coupling with an efficiency of up to 75 percent, collimation for 0.5 to 15 millimeters beam diameter, focusing objective to under one micrometer and a lot more.

The diode lasers "BluePhoton 488" are now available.

Further information about Omicron laser products can be found under www.omicron-laser.de.

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Omicron background information

Omicron has been developing, constructing and producing innovative laser systems since 1989. The highly qualified team has specialized since then in the development of individual customer solutions in the sectors of medicine, research and biotech, digital imaging and optical data storage, as well as quality assurance and measurement. Development and production correspond to European and American directives. The Asiatic market is currently being conquered through leading-edge new developments in DVD mastering. The laser systems developed in modular design enable customer requirements to be optimally satisfied and the support of customers in individual system integration. Omicron can claim to have always been one step ahead as regards product development and, with its numerous new developments in laser technology, has not only set trends, but also caused sensations internationally.