

Focus on the future: Omicron's Innovative Products Create the Future in International Laser Markets

Rodgau (mas) – Again Omicron the specialist in laser technology comes up with innovative product developments also in the fiscal year 2005 causing sensation in the international laser markets. On occasion of the Munich exhibition "Laser 2005" the inventive development team presents five pionier novelties

Omicron LDM Series – now Available with 350MHz Analogue Modulation

The new and innovative analogue modulation for temperature controlled lasers of the LDM series by Omicron reaches modulation times of up to 350MHz. This high-speed analogue modulation allows for the first time a full replacement of gas lasers with AO-modulators basing on laser diodes for applications such as DVD-Mastering, Digital Imaging, Reprography and Confocal Laser Scanning Microscopy. In this respect Omicron accentuated on linearity of modulation and – same as with all lasers of the LDM series – on the flexibility of the activation signals. The input voltage of the analogue signal can be adapted to existing signal sources. The lasers of the LDM series by Omicron are available in CW-operation or in modulated versions and in wave lengths of 370nm to 980nm. Mainly designed for the field of DVD-mastering the new LDM laser also applies to the semiconductor industry, research and science as well as to the field of Life Science.

New Intelligent CW Controller with USB Interface

On the "Laser 2005 Omicron presents a new CW controller for the laser diode system of the LDM series. The controller is equipped with a USB and with a RS-232 interface and is operated at 24Volt DC. This controller allows the operator to control the function of the diode laser by PC and thus to completely integrate it into the process of application.

The controller is furthermore equipped with entries for digital and analogue modulation with a spectrum of up to 200kHz each. By means of a driver capacity of two amps. diode current, laser diodes of up to 1,5 Watt optical output power can be integrated into the laser diode system depending on the wave length. The field of application of the new CW controller is mainly in reprography, semiconductor industry, research and science as well as in the field of Life Science.

Intensive UV Light Source without IR Portion thanks to state-of-the-art Technology

The new Omicron UV-LED modules supply for the first time a compact and unproblematic alternative to conventional UV lamps which in many applications cause problems due to the high infrared portion. With an optical power output of typically 105mW at 365nm and an emitter dimension of 0,6 by 0,6 mm the temperature controlled modules are suited for applications such as UV-curing of adhesives and polymeres, fluorescence analysis or photo catalysis. The modules are operated with a 12V power supply and can be modulated directly with up to 20kHz. Fiber interfaces and optical focusing can be put into practice according to customers' requirements.

Temperature Controlled Laser Diode Module with up to 120mW at 405nm

The new "LDM405D.100" module is presently the strongest single-mode 405nm laser diode module with round light beam profile. In addition the modular structure makes the Omicron laser of the LDM-series one of the most flexible UV/violet/blue laser diode modules.

Modulation times of 500MHz digital and up to 350MHz analogue single mode fiber interfaces with up to 85% efficiency, ray dia. of one up to 15mm ($1/e^2$) or the adjustable astigmatism are just some of the many outstanding features of the LDM-series. Developed for high-end application such as computer-to-plate (CtP), DVD-mastering, digital imaging, confocal laser scanning microscopy, flow cytometry as

well as other medical and industrial applications Omicron lasers are first choice for a good beam profile, best focusing and highest intensity. Field of application for this most innovative module is the printing industry, semiconductor industry, research and science as well as the field of life science.

New LDM Performance category with up to 400mW

The Omicron Multi-Mode laser diode modules with round beam profile basing on the latest laser diode technology perform as LDM405 up to 200mW and as LDM405D up to 400mW at 405nm. Thus a new performance category is created for medical and industrial application where highest intensity is required. In addition the modular structure makes the Omicron laser of the LDM-series one of the most flexible UV/violet/blue laser diode modules.

All new developments will be shown from June 13 to 16, 2005 on the fair "Laser 2005" in Munich in Hall B2 on stand 179. For further information about Omicron laser products contact www.lasersystem.de.

4.750 digits, 71 lines with approx 65 strokes each

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