

□ Omicron □ brings more flexibility into the world of diode lasers with its new “BrixX ps” laser series. Through simply changing in the operating mode one device offers either picosecond pulsed or modulated CW-operation.

Pulsed in the picosecond range, as well as being operated in “continuous wave” (CW) and modulated mode. The compact laser modules with completely integrated driver electronics, high precision temperature regulation and beam shaping optics can emit ultrashort pulses down to 50 picoseconds, pulses in the nanosecond range and fast analogue and digital modulated CW emission.

Diodes with up to 1500 milliwatt optical output power and wavelengths between 375 and 2300nm can be used in the “BrixX ps” systems. The light output can be either free-space or fibre-coupled. CW operation is possible with up to 100 megahertz digital and up to 1 megahertz analogue modulation. Furthermore the modules have got an electronic shutter function which can switch the emission on and off at a bandwidth of more than 500kHz. In pulsed mode the repetition rate can either be triggered by an external synchronization signal, or it can be generated by the internal, programmable frequency generator with up to 100 megahertz.

The “BrixX ps” modules can be integrated into new or already existing applications via its integrated RS-232 and USB-2.0 interfaces in an optimal way. For easy use a comfortable control software is included in delivery. Besides the standard program, customized wavelengths, or diodes supplied by the customer, can be integrated into the devices. Typical applications are microscopy, spectroscopy, fluorescence analysis and usage as seed or pump laser.