



PRODUCT INFORMATION

TEC-42 Nanosecond Pulsed Laser Series - Cat

Easy to Use and Excellent for non Experts

Description:

The TEC 42 diode laser system is designed for pulsed operation of high power diode lasers. Pulse width can be changed from 5ns up to 100ns. Repetition rates can be varied from 16kHz up to 67MHz. The operation parameters can be preset via a RS232 connector from any laptop computer. Target application is time resolved fluorescence spectroscopy. Please contact us for NIR diode laser matching fluorescence dyes which have been developed for specially for us.

Layout:

We have designed our TEC 42 pulsed diode laser system for simple handling and for easy operation by non-scientists. The internal microcontroller which operates the laser pulser can be accessed from any laptop computer for setting the operation parameters. The electrical pulsewidth which operated the diode laser can be changed digitally in steps of 5ns. The repetition rate can be preset in steps of 1MHz. The robust and compact design enables the Cat Series laser for a wide field of applications.

Benefit of NIR Diodes in Fluorescence Spectroscopy:

Fluorescence spectroscopy is a well developed detection method in the field of biomedical science. Laser fluorescence dyes have developed since the availability of Ar-Ion and frequency doubled Nd:YAG lasers in the 70s. Typical excitation wavelength of laser fluorescence dyes are in the green, blue and near UV regime. Ar-Ion and Nd:YAG laser systems are bulky and expensive in comparison with diode lasers. Diode lasers cover the red, NIR and recently the near UV spectral range. Our goal is to provide a matching pair of NIR diode lasers together with a NIR sensitive fluorescence dyes.

NIR Fluorescence Dyes:

Sacher Lasertechnik Group and Squarix GmbH have a close cooperation for developing matching fluorescence dyes for application in biomedical science. NIR fluorescence dyes can be easily detected by standard camera systems since they are operated by silicon detectors.

Application Example - Fluorescence spectroscopy of mouse cells:

Sacher Lasertechnik offers cell preparation and sample testing via fluorescence spectroscopy. Please check our test data for Vimetin Staining of mouse cells.

CONTACT & LEGAL



For further information about the product or support requests, please contact your local person in charge.

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