

Fiber laser systems for scientific and technical applications



OEM-system with software-controlled galvoscaner. The controls are located on the front panel of the 19" housing. At a system integration they can also be replaced by the corresponding control elements of a higher-level control system.

Fiber lasers have a wide range of application in the scientific and technical sectors. Spectrally narrow band fiber lasers are used for spectroscopic applications such as fluorescence microscopy, Raman spectroscopy or 'cavity ring down spectroscopy'. Pulsed fiber lasers are used for time resolved measurements, for example in time resolved fluorescence measurements or for generating plasmas.

We integrate these laser sources into scientific or technical systems or prepare the laser system for this, according to customer's requirements. The laser sources cover a wavelength range from 0,26 μm (UV light) to approximately 2 μm (near infrared light). Together with a software-controlled galvoscaner (picture above) the laser radiation could be directed selectively to certain areas of the sample or workpiece und thus a location- and time-dependent measurement can be made possible.

Industrial applications can be found in the surface processing of workpieces, such as surface structuring, (micro) marking, structuring surfaces etc.