TAILLORED SEMICONDUCTOR LASERS AND MODULES

Fraunhofer IAF specializes in the research and development of semiconductor lasers and laser modules emitting in the short-to-mid-wave infrared (1.9 – 3 µm, 4 – 11 µm). We provide our customers with customized laser sources for novel measurement and processing solutions for a wide range of applications.

compact IR-lasers

- Development of semiconductor lasers
- Application-specific semiconductor laser modules
- Semiconductor disk lasers (1.9 – 3 µm; 1 – 10 W)
- Quantum cascade lasers (4 – 11 µm; 0.1 – 1 W)
- Quantum cascade lasers with broad spectral tuning range
- Multi-band laser systems

Applications

- Spectroscopy, sensing
- Environmental and production control
- Medical diagnostics and therapy
- Stand-off detection of explosives
- Detection of hazardous substances in water supplies
- Process control