

PRESS RELEASE

For Immediate Release

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DILAS Demonstrates Scalable, High-Brightness and High-Efficiency Fiber-Coupled Diode Laser Results

Mainz, Germany, January 24, 2012 – DILAS, the diode laser company, has developed a modular diode laser concept combining high power, high brightness, wavelength stabilization and low weight, important requirements for a multitude of applications.

Through the optimization of semiconductor chip structures and optical parameters, DILAS has developed the [tailored bar \(T-Bar\) architecture](#), delivering high beam quality and high power using standard micro-optic fast-axis collimators (FAC) and slow-axis collimators (SAC), all assembled with automated processes. The device is a monolithic multi-emitter source which takes advantage of handling multiple emitters during each individual manufacturing step in order to lower complexity and enhance reproducibility of the beam quality and, hence, the fiber coupling.

Lab results demonstrated that the optical output power is scaled from 180W coupled into a 100µm NA0.22 fiber up to 1.7kW coupled into a 400µm NA 0.22 fiber. In addition, a lightweight laser unit with an output power of more than 300W for a 200µm NA0.22 fiber with a weight vs. power ratio of only 0.9kg/kW can be presented.

DILAS' tailored bar product line is ideal for research and development usage in direct diode applications as well as for fiber and solid-state laser pumping and for defense technology which requires robust but lightweight high-power diode laser sources in combination with high brightness.

About DILAS

DILAS, the diode laser company, is focused on delivering the most innovative technologies and advanced product solutions in the industry. Founded in 1994 in Mainz, Germany, with operations in North America and Asia, DILAS designs, develops and manufactures quality high-power, high-brightness semiconductor laser components, modules and systems, including fiber-coupled products for worldwide distribution. For more information about DILAS, including product updates, visit the company's website at www.DILAS.com.

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