

## Press Release

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### **j-fiber introduces its new 1200 W Active Fiber for High-Power Fiber Lasers**

**j-YDCF Ytterbium-doped active fiber has been confirmed by Fraunhofer Institute tests to perform a stable 1200 W output power with a > 85% slope efficiency**

**Jena, June 15, 2009** – j-fiber GmbH has achieved a breakthrough in high-power laser fiber development which meets the industry's increasing demand for cost-efficient fiber lasers with multi-kW output power. The costs and performance of today's fiber laser systems are significantly determined by the output power and efficiency of the active fiber, a key component in the fiber laser. The higher the output power that is being generated with each single active fiber, the more can be saved on gain and pump modules, diodes and passive fibers.

Prof. Dr. Andreas Tünnermann, industry-wide acknowledged as a pioneer and expert for advanced laser technologies, has conducted the fiber tests of j-fiber's new j-YDCF Ytterbium-doped double clad fiber with his group of scientists at the Fraunhofer Institute (IOF). "We have been closely cooperating with j-fiber in the development and testing of their new fiber. With j-YDCF j-fiber has successfully manufactured an active laser fiber which provides a steady 1200 W output power. With a slope of more than 85%, j-YDCF also achieves a high level of efficiency from output power to pumped input power."

Lothar Brehm, Managing Director of j-fiber: "With our new j-YDCF we are able to come up with our own proprietary W-shape fiber design for which we currently seek worldwide patent protection. We thank all our science and industry partners as well as the BMBF who helped us to come up with a fiber which we are convinced is a breakthrough in high-power fiber laser technology."

j-YDCF is part of j-fiber's complete portfolio of laser fibers, comprising high-performance active fibers and matching passive fibers as well as laser delivery fibers in various shapes. j-fiber thereby benefits from its unique chain of in-house competences and resources allowing to develop its own glass material and preform designs for innovative fiber development and volume manufacturing.

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## About j-fiber GmbH

j-fiber is one of the worldwide leading suppliers of high-performance Multimode and Singlemode optical fibers for advanced Telecom/Datacom networks and provides specialty fiber and preform solutions for use in high-end industrial, military, and research and development applications. With its subsidiaries the company provides the complete value chain of fiber making from glass and preform design and production to the final fiber drawing process. Since 2007, j-fiber has been a member of the LEONI-Group, a large global supplier of wires, cables and wiring systems for applications in the automotive, transport, communications, and infrastructure sectors, as well as to other industries. j-fiber is strongly committed to best fiber making practice serving its worldwide client base with innovative cost-efficient, high-performance fiber products.

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