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IPG Photonics Corporation announced that it attained 2 kilowatts of single mode output power from its Ytterbium fiber laser (1075 nm) emitted from a 19 micron low mode fiber. The laser provided record brightness compared to all results and demonstrations to date. IPG Photonics CEO Dr. Valentin Gapontsev presented this achievement at the Photonics West conference held in San Jose, California on January 24th.

IPG said that the fiber laser produced a single mode parallel beam with an M2 of < 1.2. The laser will be added to IPG's expanding line of commercial fiber lasers offering perfect beam, record brightness and wall-plug efficiency, ultra-long diode life, maintenance-free operation, and a compact footprint.

The Ytterbium fiber laser has a single mode fiber delivery for easy integration into customer set-ups and systems. These results are made possible by using newest IPG's proprietary highest in-fiber efficiency (>50%) semiconductor diodes. With output power up to 20W, the diodes have high brightness.

"We have produced the absolutely brightest continuous wave laser of any kind", stated Dr. Valentin Fomin, a project leader from IPG Laser GmbH, the German subsidiary of IPG Photonics Corporation. "Only chemical lasers are able to provide higher power density in short-term pulses, but fiber lasers can operate continuously for years" he added.

This record brightness achievement builds on IPG Photonics' single mode output of 600 watts in February of 2004, for which it received Laurin Publishing's 2004 Photonics Circle of Excellence award recognizing the laser industry's best new products. This was followed by the market introduction of the 1,000 watt single mode fiber laser in the third quarter of 2004. IPG Photonics, with its impressive technical staff, is widely recognized throughout the world as the leader in fiber laser technology.

About IPG Photonics

IPG Photonics has been a global leader for over thirteen years in the design and manufacture of high performance fiber lasers, fiber amplifiers, and Raman pump lasers for materials processing, aerospace, test and measurement, and other commercial applications.

IPG's proprietary technology, materials science expertise and vertically integrated manufacturing operations enable IPG to produce the world's largest range of cost-effective high and low power fiber lasers, and amplifiers with superior efficiency, performance, reliability and quality.

IPG Photonics has its world headquarters in Oxford, Massachusetts and manufacturing facilities and sales operations in Massachusetts, Germany, Russia, Italy, Japan, India, Korea, and the United Kingdom. For more information, visit http://www.ipgphotonics.com/. IPGP-G

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