Intense Announces 793nm Multi-Emitter Pump Modules

Munich, Germany - May 24, 2011 -- Intense Ltd. today announced the release of prototype versions of its next generation Series 8000 793nm High Power Pump Laser Diode Module at Laser World of Photonics in Munich, Hall 1, Booth 400 (IMM Photonics). The new multi-emitter pump module delivers 20W of output power from a 105 micron core fiber, 0.15 or 0.22 Numerical Aperture. It is designed to meet growing demand for laser pumps in the field of eye-safe, Thulium-doped fiber laser systems. The pump module is used in defense and aerospace applications, such as LIDAR and direct infrared countermeasures, and to replace existing diode pumped solid-state (DPSS) technology in medical and industrial applications.

The Series 8000 793nm standard Mini-Fiber Packages (MFP) provide a robust and cost effective solution for applications with power requirements in the 4 to 5W range. The same high power chip technology used in Intense's 793nm MFP[1]s is now available in new multi-emitter packages designed to yield a maximum optical pump power of up to 20W. The building block 4 to 5W laser diodes can also be supplied in free space configuration on C-mount with a FAC-lens, or on isolation sub-mounts.

"Over the years, we have continuously improved our industry leading 793nm laser diode technology," stated Berthold Schmidt, CEO, Intense Ltd. "The multi-emitter modules with the next generation of 793nm chips are an important extension of the 793nm MFP product line that incorporates a single laser diode and yield of about 4.5W fiber coupled output power."

The Series 8000 793nm Pump Laser Diode Module is based on Intense's next generation 793nm single emitter chips, which incorporate improved asymmetric waveguide design with narrow beam divergence and Intense's patented Quantum Well Intermixing (QWI) technology to maximize power and reliability.

Quantum Well Intermixing

The entire Hermes product line will be on display at Laser World of Photonics, including the QCW bars the provide up to 400W of output power, and the QCW 1kW, 2kW, and 3KW stacks with 1kW, 2kW, and 3kW of output power, respectively. All Hermes bars and stacked arrays incorporate Intense's patented Quantum Well Intermixing (QWI) technology. This increases the brightness and reliability of the lasers while dramatically reducing instances of catastrophic optical damage (COMD). These bars and stacks are assembled using AuSn hard solder and designed for a wide range of aerospace, defense and industrial applications.

Price & Delivery

The Series 8000 793nm Pump Laser Diode Module prototypes are available on a limited basis to key OEM partners in preparation for a full product lunch in 2012.

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