

For Immediate Release
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Press Release

NP Photonics and Spectra-Physics Jointly Introduce World's First Erbium Micro Fiber Amplifier (EMFA) Products

NP Photonics and Spectra-Physics, a Thermo Electron business (NYSE:TMO) have introduced the world's first miniaturized optical fiber based amplifier products for telecommunications. These unique products use NP Photonics' state-of-the-art Erbium Micro-Fiber Amplifier (EMFA) technology pumped with Spectra-Physics' Telcordia compliant laser diodes. The cost effective EMFA technology uses a proprietary erbium-doped glass to produce high optical gain over just a few centimeters of fiber, rather than over many meters, as with traditional EDFAs.

The initial products being introduced are the Scorpion Amplet MMP-7012, and the Scorpion Gainlet MMP-7010. The Scorpion Amplet, offering a high level of integration, mates the EMFA gain fiber and semiconductor pump laser together with all the necessary passive components, drive electronics and control software to make a turnkey amplifier system. This product includes feedback control electronics incorporating photodiode monitoring, isolation and optional gain flattening filters. Additional intelligence options can be added with a software upgrade. The Telcordia compliant Scorpion Amplet delivers 15 dB of gain over the entire C Band, offering similar functionality to traditional EDFA's for metro and access applications, but in a much smaller, more cost efficient package. Higher gain amplets based on EMFA technology will be available in the future.

The Gainlet is a gain block consisting of an EMFA gain fiber efficiently coupled to a semiconductor pump laser. It delivers customizable gain over the entire C Band and is an ideal building block for channel and band amplification, as well as for integration into DWDM components as loss compensators. The Scorpion Gainlet is a flexible product that can readily be customized to meet the specific needs of OEM component and system builders.

Founded in 1998, NP Photonics is the originator of the Erbium Micro Fiber Amplifier (EMFA) technology and is dedicated to the design manufacture and marketing of intelligent, low cost, compact fiber amplifiers and fiber amplifier arrays. The company is developing a wide family of products based on its EMFA technology platform.

Founded in 1961, Spectra-Physics, a wholly owned subsidiary of Thermo Electron (NYSE:TMO), is a global leader in the design, development, manufacture and distribution of semiconductor-based lasers and laser optics for a variety of end-markets. The company offers a diverse line of laser products backed by a sales, service and support organization located in more than 35 countries.

For additional information contact:

Daryl Eigen
NP Photonics
520-799-7486
Fax 520-799-7403

daryl@npphotonics.com
www.npphotonics.com

Bill Holtkamp
Spectra-Physics
650-966-5579
Fax 928-563-0061

bholtkamp@splasers.com
www.spectra-physics.com

The following constitutes a "Safe Harbor" statement under the Private Securities Litigation Reform Act of 1995: This press release contains forward-looking statements that involve a number of risks and uncertainties. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements are set forth under the heading "Risk Factors" in the company's Annual Report on Form 10-K for the fiscal year ended December 30, 2000. These include risks and uncertainties relating to: integration of the company's instrument businesses, the company's guarantee of obligations of a subsidiary that was spun off, the effect of exchange rate fluctuations on international operations, potential impairment of goodwill, the need to develop new products and adapt to significant technological change, dependence on customers that operate in cyclical industries, the effect of changes in governmental regulations, and dependence on customers' capital spending policies and government funding policies. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.

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