



**LAMBDA OPTICALSYSTEMS ANNOUNCES AVAILABILITY OF LAMBDA NODE<sup>™</sup> ALL-OPTICAL SWITCH AND LAMBDA CREATE<sup>™</sup> INTEGRATED NETWORK MANAGEMENT SUITE**

**Company Collaborates with the Naval Research Laboratory in Ground Breaking All-Optical Demonstration at OFC/NFOEC 2005**

**ANAHEIM, CA, MARCH 8, 2005** – Lambda OpticalSystems, the leading developer of all-optical switching solutions, today announced the availability of its LambdaNode<sup>™</sup> 2000 all-optical switch and the integrated LambdaCreate<sup>™</sup> network management suite. Lambda OpticalSystems' all-optical solutions eliminate the need for Optical-Electrical-Optical (OEO) conversions that slow high-bandwidth data transmissions in traditional optical networks. The company's next-generation product suite empowers organizations to develop high-performance, cost-effective, agile all-optical networks that support growing requirements for high-bandwidth services and advanced applications.

“The notion of an all optical network has intrigued optical network planners for years, and the great false start of five years ago dealt all optical networks a bad name,” said Michael Howard, principal analyst and co-founder, Infonetics Research, “whereas the real failure then was that the equipment was not up to the task: it was premature, un-automated, labor intensive, and very expensive. With the continued development of optical switching components, automatic power monitoring and control, and software controlled provisioning, we are now in a different time. The Lambda OpticalSystems equipment effectively combines all-optical switching with integrated DWDM and a GMPLS control plane, which allows carriers to now think about an efficient all-optical network. An all-optical transport network can result in significant network simplification and a networking environment that is well suited for next generation, real-time, bandwidth intensive applications.”

**Live demonstration with Naval Research Laboratory**

In a concurrent announcement, Lambda OpticalSystems revealed it will participate in a continuous, live demonstration with the Naval Research Laboratory (NRL) at the OFC/NFOEC conference (March 8-10, 2005, Anaheim, CA). The demonstration will stream high definition television (HDTV) and large-scale, InfiniBand-empowered remote visualization applications over a local all-optical network, incorporating two LambdaNode 2000 switches.

“There is need of high-bandwidth and low-latency networking capabilities that can handle not only aggregated, but also single streams from 10Gbps to 40Gbps today at the application layer,” said Dr. Henry Dardy, Chief Scientist for the Center for Computational Science at the Naval Research Laboratory. “The transport and visualization of such high volume of information requires transparent high bandwidth all-optical network elements, efficient data storage and retrieval by supercomputers locally and across wide-area networks. This demonstration proves that all-optical networks can meet these requirements effectively today.”

“Lambda OpticalSystems is pleased to play an important role in NRL's demonstration,” said Irfan Ali, president and chief executive officer, Lambda OpticalSystems. “We are committed to providing cost-effective, agile, high-performance all-optical networking solutions that support customer requirements for high-bandwidth applications without delay.”



NRL and Lambda OpticalSystems also plan to unveil a nationwide all-optical network, extending InfiniBand transport protocol technology at Gigabyte/second rates between Washington D.C. and the OFC/NFOEC conference site in Anaheim, California – a distance close to 5,000 kilometers – the largest InfiniBand-Wide Area Network implementation to date.

To view these demonstrations, OFC/NFOEC conference attendees can visit the NRL (booth #2691) or Lambda OpticalSystems (booth # 3212).

NRL currently utilizes Lambda OpticalSystems technology in the Advanced Technology Demonstration Network (ATDnet), an experimental research network connecting NRL with other U.S. Government agencies. NRL is focused on accelerating availability of optical networking technologies to connect supercomputing platforms that support mission-critical government requirements.

### **LambdaNode 2000 Switch**

The LambdaNode 2000 is the industry's only integrated all-optical switch, eliminating the requirement for OEO conversion equipment to enable lower signal delays, reduced cost, higher performance, improved reliability, and enhanced manageability. The LambdaNode 2000 utilizes 3-D MEMS (micro-electro-mechanical-systems) for reliable, rapid switch time and low signal loss for effective optical switching. Built for ring, mesh, and ring/mesh metro and regional networks, the LambdaNode 2000 fully integrates Dense Wavelength Division Multiplexing (DWDM) technology, which multiplies fiber capacity and allows diverse packet formats (SONET/SDH, IP, ATM, etc.) to travel together at the same time on one optical fiber. Protocol agnostic, the LambdaNode 2000 is compatible with GMPLS (Generalized Multi-Protocol Label Switching), a standard that enables a broad suite of new communications applications.

### **LambdaCreate Software**

The LambdaCreate network management software suite enables remote, real-time, end-to-end control of all LambdaNode 2000 switches in the metro/regional network. The Lambda Optical Control Plane (OCP), the operating system running on the LambdaNode, fully integrates the LambdaNode switching family with the LambdaCreate software suite. Fully FCAPS (Fault-Management, Configuration, Accounting, Performance, and Security) compatible, the LambdaCreate software suite provides robust functionality in all management disciplines. Its intuitive point-and-click graphic interface provides a single view of the entire network and each LambdaNode, allowing network operators to manage all-optical networks remotely from any location, at any time. This functionality reduces the need for manual provisioning and network management – speeding service delivery and boosting network performance.



## About Lambda OpticalSystems

Lambda OpticalSystems is committed to the development of next-generation all-optical solutions to transform transport networks. The company's family of all-optical switches with integrated DWDM and GMPLS control plane lets telecommunications carriers, government agencies, and research and education networks deliver high-bandwidth services while maximizing network management efficiency and affordability. For more information, call 703-689-9500 X-1006 or visit [www.lambdaopticalsystems.com](http://www.lambdaopticalsystems.com).

## About the Naval Research Laboratory

NRL is the Department of the Navy's corporate laboratory and conducts a broad program of scientific research, technology and advanced development. The Laboratory, with a total complement of nearly 2,500 personnel, is located in southwest Washington, DC, with other major sites at the Stennis Space Center, MS; and Monterey, CA. For more information about NRL, visit <http://www.nrl.navy.mil>.

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For media inquiries, please contact: [press@lopsys.com](mailto:press@lopsys.com).

or

Rosanne E. Desmone  
Mt. Vernon PR & Communications  
PO Box 215  
Mt. Vernon, VA 22121  
703.799.8165  
703.946.3820 (cell)  
[rdesmone@mtvernonpr.com](mailto:rdesmone@mtvernonpr.com)  
[www.mtvernonpr.com](http://www.mtvernonpr.com)