



## COMPANY OVERVIEW

### LAMBDA OPTICALSYSTEMS – SWITCHING INTO THE OPTICAL FUTURE

The global telecommunications carrier industry is in the midst of disruptive change, transitioning its infrastructure to meet the demand for and facilitate the delivery of reliable, affordable, high-bandwidth multi-service applications. Government agencies and enterprises alike have ever-increasing requirements for fast, high-bandwidth application delivery, particularly in the realms of grid computing, remote visualization, and terabit file transfer. The trends toward global network simplification (enabled by IP proliferation), standards-based networks, the maturation of WSS (wavelength selective switch) technology, and the growing migration to Ethernet are driving advances in optical switching that are quickly gaining traction and making their way to market.

As a pioneer in all-optical switching, Lambda OpticalSystems has adopted a standards-based architecture that allows it to focus on the delivery of dynamic optical networking for next-generation networks. Based on the proven AdvancedTCA<sup>®</sup> standard, the platform architecture supports the integration of equipment from multiple suppliers, enabling rapid time-to-market and offering customers flexibility, reduced Capex/Opex, and investment protection.

The first company to deliver an all-optical switch — the LambdaNode<sup>™</sup> 2000 — Lambda OpticalSystems is ready to deliver on its vision of all-optical networks that eliminate the need for expensive OEO components and increase the efficiency and reliability of all-optical switching.

Lambda OpticalSystems offers a full set of all-optical networking products, including:

- The Lambda Node 2000, the industry's first all-optical switch,
- the LambdaNode 3000 all-optical cross connect,
- the LambdaNode 5000 optical services platform,
- the LambdaNode 200 optical switching system, and
- the LambdaCreate<sup>™</sup> software, the associated suite of distributed and dynamic control plane and integrated network management software tools.

The company empowers its customers to layer these next-generation technologies on top of their legacy systems to seamlessly upgrade their infrastructure while protecting installed investments. The Lambda Node 2000 supports both ring and mesh topologies, as well as migration of ring to mesh architectures, which are recognized for their survivability and ability to provide effective scaling for network growth.



The LambdaNode 3000 all-optical cross-connect adds intelligence to static DWDM transport networks. It adds protection and restoration capabilities while reducing the cost of high-speed 10G and 40G router interconnects. The LambdaNode 5000 integrates WSS technology with AdvancedTCA shelf to provide an industry-based modular approach to transport networks. The LambdaNode 200 enables dynamic fiber switching for enterprise and education networks. In addition, all of the LambdaNode optical switching platforms support GMPLS control plane, which automates installation, circuit provisioning, protection and fault isolation. Additional benefits of Lambda OpticalSystems' technology include:

- **Protocol Independence** – LambdaNode is protocol and bit-rate independent, carrying each signal on its own wavelength and enabling savings through the elimination of dedicated protocol conversion equipment.
- **Quality of Service** – LambdaNode ensures reliable and consistent network traffic. It eliminates the variable delays caused by signal processing at the nodes in traditional optical network topologies. Point-to-point delay is fixed, allowing the delivery of predictable and manageable real-time, high-speed services throughout the network.
- **Transparency** – As Lambda OpticalSystems' solutions are designed to operate in an overlay fashion across existing network configurations, network components provide genuine transparency without any disruption of existing signals – allowing simple migration to higher degree or meshed networks.
- **Flexibility** – The Lambda OpticalSystems solutions suite offers flexibility to support all technology protocols and applications – Ethernet, HDTV, etc. – including proprietary signals. In addition, network operators can efficiently deploy a Lambda OpticalSystems network regardless of network topology – including ring, mesh, and hybrid configurations
- **Simplicity and Scalability** – Lambda OpticalSystems' solutions suite empowers network managers to plan, build, and manage new networks easily from one remote interface. Operations costs are reduced through elimination of provisioning errors and speeding of service activation. For example, managers can rapidly provision new customers online and reconfigure services. The solutions' scalability enables organizations to expand capacity without large capital expenses, addressing the carrier market's requirement to increase bandwidth and availability at the lowest possible cost
- **Security** – Lambda OpticalSystems solutions provide security at both the physical and logical layers, enabling the creation of services such as optical virtual private networks (O-VPNs) and virtual DWDM paths. With the growth of sensitive information transportation over metro and regional networks, an all-optical approach is required to ensure a safe and secure network.



Based in Reston, Virginia, with additional facilities in Holmdel (New Jersey), Tokyo, Seoul, and Milan, Lambda OpticalSystems boasts a world-class management team and a research and development organization focused on bringing to market innovative solutions that exceed customer requirements and transform the telecommunications landscape.

Lambda OpticalSystems brings you the all-optical future – today.

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)