

***Optical Modulators: -- Markets Reach \$22.6 Billion By 2024***

LEXINGTON, Massachusetts (September 8, 2018) – WinterGreen Research announces that it has published a new study *Optical Modulators: Market Shares, Strategy, and Forecasts, Worldwide, 2018 to 2024*. The 2018 study has 272 pages, 168 tables and figures. The vendors in the optical modulator industry have invested in high-quality technology and processes to develop leading edge broadband network capability a being implemented in the mega data centers.

Two companies in the optical modulator industry jump out: Lumentum and Lightwave Logic. Lumentum is using optical modulators to implement Lidar for self-driving cars. This is the be all and end all technology to support automated auto navigation, to make the new electric cars operate in a manner that is credible and useful.

Lightwave Logic is positioned to bring PIC (Photonic Integrated Circuit) based technologies to market in various roles that include Solar, LED lighting, and Integrated Photonics for fiber communications. High speed polymer based integrated photonics is part of a polymer PIC platform at Lightwave Logic Inc. The molecular level design provides performance, stability and cost-efficiency. They have the potential to replace more expensive, lower-performance materials and devices used in fiber-optic ground, wireless and satellite communication networks.

That being said, virtually every company profiled is very interesting, well positioned in an explosively growing market. 400G optical transceivers market driving forces relate primarily to the implementation of networks within the mega data centers and the interconnects between the data centers. Self-driving cars, smart cities, telemedicine, and the Internet are market segments served by optical modulators.

According to Susan Eustis, leader of the team that prepared the research, “Optical modulators bring efficiency and far lower prices to 100G and 400G data transport markets. HPC, high performance computing, and mega data centers that implement broadband networks in cloud computing environments form the basis of the new industrial revolution. Video, Internet adoption, and tablets drive demand for broadband mega data centers. Markets are influenced by apps, augmented reality. IoT, the move to cloud computing and the adoption of smart phones by 9.5 billion people by 2020. Mega



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data centers that support online commerce, streaming video, social networking, and cloud services for every industry are expected to adopt 400G optical transceivers as a fundamental technology. Software as a Service (SaaS) is a primary offering that will leverage 400 G optical transceivers in the mega data center.”

The global optical modulator market at \$2 billion in 2017 is expected to be \$22.6 billion in 2024 driven by the availability and cost effectiveness of 100 Gbps, and 400 Gbps devices. Next generation optical modulator devices use less power, are less expensive, and are smarter and smaller. The adoption of widespread use of the 100 Gbps devices, followed by 400 Gbps devices and the vast increases in Internet traffic are core to helping manage change in the large mega data center and communications interconnect and automobile navigation and infrastructure markets.

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WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.



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