Advantage Optics/InterOptic – The Optics Experts
Turning Light into Data and Back Again, Flawlessly

It is a well-established fact that there is staggering growth in data traffic due to a substantial increase in video streaming content and the rising reliance on IoT devices, cloud computing, and the like. Additionally, the world is undergoing a major Pandemic "Covid" which is creating abnormal increased user demand to connect to their companies and make purchases remotely placing even more pressure to expand IT networking capabilities in many companies, industries and data centers. The "thirst" for internet services and capability is driving increasing costs of IT networking equipment to build server farms and data centers

Brian McConnell

to address the increased demand. Today most companies still rely on the "OEM" equipment suppliers to solve these issues, however, there are smarter, lower cost alternatives available to help lower the cost in expanding and building the IT network that the "OEM" equipment suppliers will never tell you. One of the key components to IT networking is connectivity through fiber cables which provide the physical connection to almost all IP network switches and routers. Fiber optic cables transmit billions of data via extremely fast pulses of light, but these light pulses must be converted to electrical signals so that the switches and routers can transport the IP addresses to make the correct connections. The device that provides this function is called an "optical transceiver." Why is this so important? Because one of the best ways to reduce the costs of IT networks is to unbundle the optical transceivers from the OEM's IP Network switch/router solution. Network optical transceivers can make up 10% to 15% of an enterprises' total network capital spending and typically are 30% to

50% of the hardware cost when combined with the OEM switch/router. Optical transceiver costs can be as high as 50 % of networking platforms (i.e., Switches/Routers).
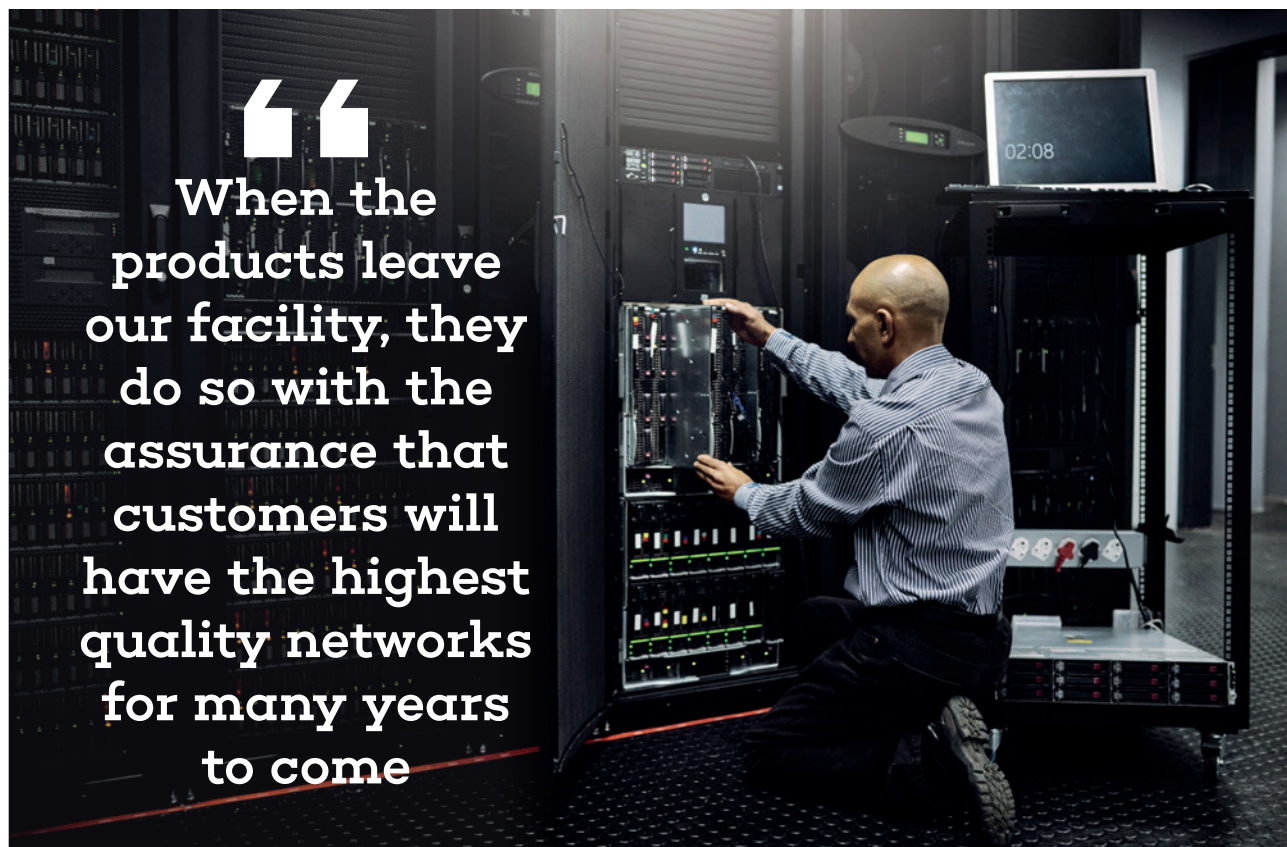
To transport this incessant and immense traffic over an optical network seamlessly, whether FC, Ethernet, or SONET/SDH, network providers need to rely on cutting-edge optical transceivers. However, choosing the right transceiver that balances functionality and cost is quite the challenge for many organizations. With over 16 years of experience helping IT professionals adopt the best optical transceivers for their networks, the InterOptic team promises clients a product quality that not only far exceeds OEMs but also helps them save over 30 percent of their budgets when compared to OEM solutions.
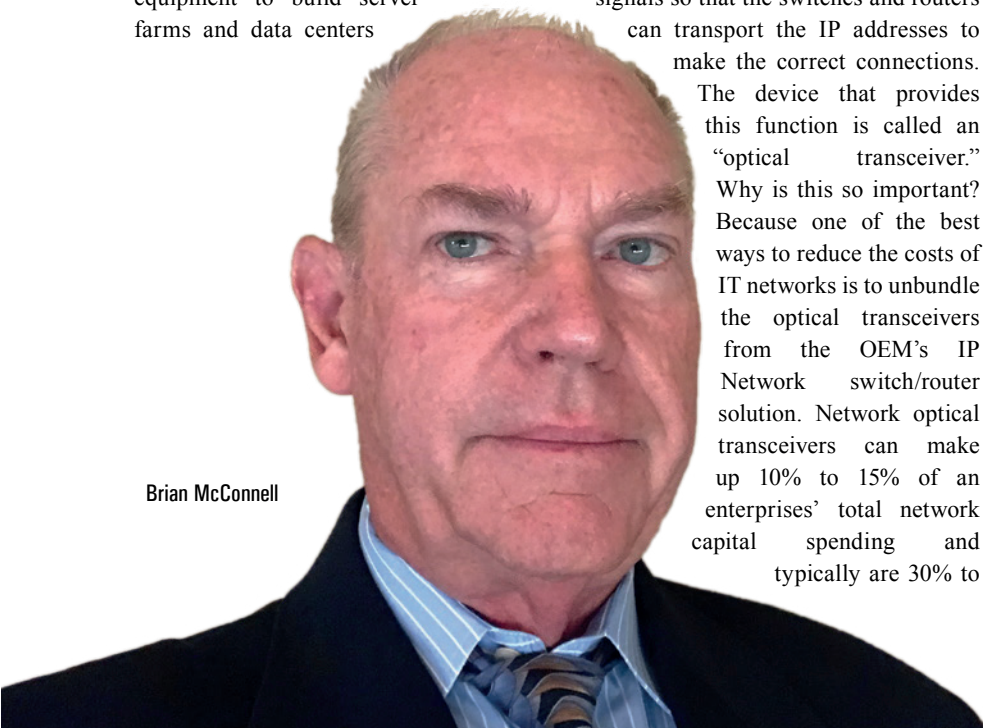
A transceiver is an integral part of a fiber optics network since it converts electrical signals to optical signals and optical signals to electrical signals. These processes need to be carried out with impeccable precision and speed if a network provider is to avoid considerable data loss. In order to minimize this loss, companies invest heavily in acquiring state-of-the-art routers and switches; whereas expenses can be greatly reduced if they turn their focus on improving the quality of transceivers instead. The InterOptic team have real optical experts that understand

InterOptic's brand-equivalent transceivers are made with the same manufacturing methods, hardware and are tested to the same (or higher) to perform equivalent to OEM devices. "As a supplier, we move the cost needle to a lower threshold and minimize the cost per bit for data transmission," adds McConnell. Since a massive growth in network traffic is urgently driving the need for bandwidth upgrades from 100 gigabit Ethernet (GE) to 400GE in data centers, keeping the cost of optical transceivers low is a high priority for data center operators. InterOptic allows

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the technical IP Network and manufactures only the highest quality optical solutions that are fully compatible with Cisco, Juniper, Brocade, Arista, and other OEMs, but at a far lower cost. Moreover, InterOptic meticulously tests every transceiver that is shipped out as opposed to OEMs that sample-test production batches before distribution. "When the products leave our facility, they do so with the assurance that customers will have the highest quality networks for many years to come," says Brian McConnell, President and CEO of Advantage Optic/InterOptic.

InterOptic has delivered tens of thousands of optical transceivers for federal, state, and local governments, and the solutions meet all military requirements. With a key mission to alleviate the financial burden on IT network providers,

organizations to remain competitive by manufacturing cost-effective yet high-quality optical transceivers.

The team is focused to help customers in their design of IT Networks. InterOptic lends this know-how to its clientele when helping them build premium-quality networks. Its leaders understand how to maximize network performance and value for their clients. During IT networking, InterOptic works with its customers to ensure that they not only save money but are also architecting a network that is meant to withstand the test of time. Today, InterOptic equipment drives high fan-out 40Gb and 100Gb hubs and has laid the backbone for seamless LAN and data center interconnection with its innovative fiber optic technology. **TC**