



CORPORATE OVERVIEW

Current optical networks have evolved to support today's exponential growth in data traffic by adding intelligence into network elements, first through Software-defined Networking and now with the development of Intent-based Networking. However, the physical fiber-optic layer has been treated as a dumb pipe and requires slow, expensive and error-prone manual provisioning to respond to bandwidth growth. The need to rapidly respond to enterprise and hyperscale connectivity needs, expand to the edge in 5G deployments and unmanned edge data centers, and manage the increasing percentage of optical costs in networks makes the present mode of operation unsustainable. Telescent is ideally positioned to bring intelligence to the fiber-optic layer and address these challenges, enabling the next phase of automation.

Telescent eliminates service delivery bottlenecks and the accumulation of errors by enabling instant provisioning, validation and reconfiguration of physical cross-connects. The Telescent solution incorporates physical robotics to configure and reconfigure, connect and disconnect, troubleshoot and validate fiber optic interconnections inexpensively and on-demand. This solution also delivers a suite of unique and powerful software applications to automate provisioning, validation testing, monitoring, record-keeping and dynamic resource allocation.

Telescent's innovative design overcomes the scale, reliability and cost issues that have plagued prior attempts to automate the physical layer. These attributes are enabled by Telescent's fundamental discovery of an anti-collision routing algorithm based on the mathematics of knots, braids and strands (49 patents issued and pending). This algorithm drives a compact, low-cost robot as it re-arranges internal fiber optic cables to establish pristine, latching, highly reliable optical connections with the lowest possible insertion loss of any technology or connectivity solution at the scale of 100 to 10,000 or more interconnects. By incorporating pure optical fiber connections within a modular design, all current and future communications protocols and bandwidths are supported to provide a truly future-proof, pay-as-you-grow solution.

The Telescent solution is a proven, highly-reliable core network element, manufactured by Flextronics (our contract manufacturing partner), certified to the rigorous Telcordia NEBS Level 3 standard, and deployed in multiple Tier 1 production networks since 2019. The solution is priced to deliver a very compelling business case to our customers, for example delivering an IRR > 35% to one of our multi-tenant data center customers.

Telescent is currently deployed in product networks with multiple service providers. Our broader set of customers span all market verticals in the communications space. Hyperscale, cloud, mobile 5G, telco and enterprise data center operators are forecasted to deploy ~100M interconnects per year, a majority of which can be automated cost-effectively by the Telescent solution.

In conclusion, the Telescent solution extends Software-defined Networking and virtualization from the logical level (today) to the physical level, something that was thought to be impossible. This solves a problem that has plagued the industry for decades and enables the next phase of automation.

