

iMcV-FiberLinX-II Single-Strand Fiber at Gtd Teleductos, Santiago, Chile

Chilean Telecommunications Operator Gtd Teleductos Deploys *FiberLinX-II* System to Offer Transparent LAN and Metro Ethernet Services to Business Customers Nationwide.

Chile is leading the telecommunications industry in Latin America as a result of privatizing the sector some 20 years ago and continually implementing new technologies. Internet penetration is growing at a fast pace with broadband connections slated to soon surpass dial-up. In fact, Chile is predicting the number of its broadband connections will increase 10-fold— from 100,000 lines at the beginning of the decade to 1,000,000 by 2010.¹

Headquartered in Santiago and providing data, voice and video transmission services to business customers, Gtd Teleductos, a subsidiary of Grupo Gtd, shares its country's forward-thinking approach to technology. As an access provider, Gtd Teleductos owns and operates over 3,200 miles of fiber optics and copper-wire networks in Chile, and efficiently uses that cabling to maximize the company's infrastructure. In addition, Gtd Teleductos continually looks for new ways of offering better services.

Using media converters allowed Gtd Teleductos to provision Ethernet service; the provider connected copper-based customers with media converters on either side of a fiber run. Although it made the critical connection for providing service, this method does not, however, allow management of the media converter (i.e. the customer premises equipment [CPE]) at the remote site.

Wanting to provide a higher quality and more efficient service, Gtd Teleductos migrated to the IMC Networks FiberLinX-II system to provision dedicated, high-speed connections over optical fiber. The price difference is minimal yet the benefits are substantial.

"Gtd Teleductos is aggressively expanding into the next-generation Ethernet/IP services to meet a growing demand within the enterprise market", said Danilo Giral, Network Director of Gtd Teleductos. "The key requirement for these services is quick deployment, low cost, security and the ability to provision the service over just one strand of optical fiber. The FiberLinX-II system met all our expectations, and enables us to manage and monitor the entire system from a central location", continued Giral.

As with media converters, FiberLinX-II terminates the service provider fiber and offers the customer a familiar 10/100 twisted pair interface. Deploying the FiberLinX-II solution in pairs between the central office (Host) and the customer's network edge (Remote), the unique remote end management capabilities of FiberLinX-II also allow the operator to configure, manage and monitor the CPE from the central office, eliminating costly site visits after the initial set up.

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Although FiberLinX-II has an additional port to use exclusively for management, Gtd Teleductos opts to use one of the data ports on the host unit for both data and management traffic, then segregates traffic types with the device's VLAN functionality. Host management traffic is not visible to the

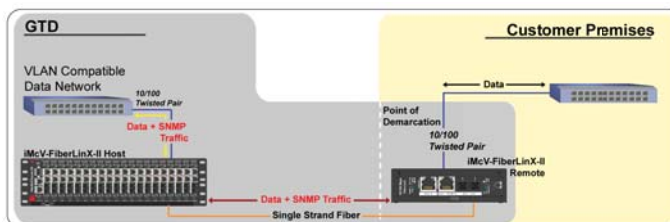


remote or customer network nor is access to the customer network required, guaranteeing end-to-end data integrity.

As stated earlier, Gtd Teleductos efficiently uses its installed cabling which is exactly the reason the access provider uses the single-strand fiber version of FiberLinX-II. Single-strand fiber technology allows two wavelengths to share one fiber strand— Full-Duplex data travels on different wavelengths (1310 nm and 1550 nm)— effectively doubling the capacity of fiber.

In addition, FiberLinX-II also includes rate limiting which allows the operator to sell customers any line speed up to 100 Mbps. Should customer requirements increase, the service provider can allocate more bandwidth in seconds without replacing any of the equipment in the field. Gtd Teleductos will soon begin using this feature to offer services from 10 to 100 Mbps in 10 Mbps increments.

Gtd Teleductos has nearly 1,000 FiberLinX-II units in the field, and is continually adding more. ■



Report from a private organization (Publication Manual of the American Psychological Association, 4th addition) is referenced as follows: Arthur D. Little (2003, April), Enersis PLC Business Opportunity Profile (October 23rd version), Madrid, Spain.

Grupo Gtd also owns Gtd Telesat, Gtd Internet, Gtd Larga Distancia and Gtd Telemedic. These companies shape Grupo Gtd as a complete holding in the telecommunications business, providing various types of solutions, with more than 100,000 operational services, and as a leader in the implementation of new technologies. Gtd Grupo' main shareholders include Chilean investors and Citicorp.

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