Clever new pedestal and enclosure designs

By Masha Zager ■ *Broadband Properties Telecom Editor*

Falcon Broadband (*www.falconbroadband.net*), a CLEC in Colorado Springs, Colorado, selected the Verimatrix Video Content Authority System to provide digital video content security over its IP network. Falcon plans to launch the new IPTV service in Q2 2007 when it has completed its dedicated fiber-to-the-home IP network.

Hawaiian Telcom (*www.hawaiiantel.com*), the ILEC in Hawaii, selected Alcatel-Lucent's Triple Play Service Delivery Architecture for its network transformation. Hawaiian Telcom will deploy Alcatel-Lucent's access and IP routing solutions, including both fiber-to-the-home and fiber-to-the-node, to replace its existing high-speed Internet infrastructure and to deliver IPTV, advanced and interactive Internet and premium Ethernet and IP VPN services.

North Dakota Telephone Company (*www.gondtc.com*), a telco in Devils Lake, North Dakota, selected an IPTV platform from Optibase to deliver local television channels to its subscribers. Services will be distributed over two platforms, ADSL2+ and active FTTP networks. Local channels will be received and processed in NDTC's Optibase headend and then aggregated with 80 television channels of non-local content.

Cross-Connect Kit Future-Proofs Fiber Deployments A great attraction of fiber-to-the-premises is that it is future-proof: Fiber optic cable is expected to last for half a century and to continue supporting ever more sophisticated electronics. But that doesn't mean providers can install fiber networks and then forget about them for fifty years.

Rather, network providers keep reconfiguring and adding to their outside plant for a number of reasons, ranging from new building to increasing take rates to changing patterns of use. In general, providers – especially those with smaller networks – try to avoid installing capacity until it can begin generating revenues.

This continual reconfiguration creates another sort of "future-proofing" problem, where changes to the network architecture make fiber distribution cabinets obsolete. Some FTTP providers are now migrating from traditional passive optical network (PON) architectures with 1x32 splitters to much lower split ratios or even to "home-run" architectures (PON without splitters) or active Ethernet designs, and have found that their cabinets have to be rearranged or even replaced.

APA Cables & Networks (www.apacn.com) recently announced a cross-connect upgrade kit for its outside plant cabinet platform that will address these problems. The upgrade kit allows field technicians to convert an APACN cabinet deployed in traditional PON architectures to a cross-connect solution. In a cross-connect solution, changes can be made through programming, instead of by plugging or splicing cables. This means that the cabinet can easily support changes to the fiber distribution architecture to enable additional bandwidth per customer.

Johnny Hill, APACN's vice president for product development and management, says many of the company's clients begin by providing voice and data over fiber and then introduce video services a few years later. Others that offer triple-play services from the outset may begin with standard-definition video and then decide to add several high-definition channels. To meet these increased bandwidth requirements, they need to change the splitter count or even get rid of the splitters entirely. A cross-connect system allows them to make these changes remotely, without disrupting customers or making any changes to the cabinet.

The upgrade kit also allows users to redeploy splitters from the cabinet to the central office, for easier servicing and troubleshooting.

Charles Industries Introduces Fiber-to-Cell Site Pedestals for Wireless Backhaul Charles Industries (www.charlesindustries.com) announced a new line of Fiber-to-the-Cell Site (FTTCS) buried distribution pedestals that provide preconnectorized fiber drops to multi-tenant cell sites, facilitating fiber service provisioning to multiple wireless operators.

The FTTCS pedestals serve as environmentally protected fiber distribution points at cell towers and other cell sites. Each pedestal houses fiber splice trays and a bulkhead with 18 or 24 SC/UPC adapters for simplified fiber provisioning. Technicians have above-grade access to the full splicing and distribution work area, allowing them to turn up service to wireless customers on a "grow-as-you-go" basis. The company says the new pedestals let service providers distribute T1, Ethernet and other high-bandwidth services to an entire cell site at a fraction of the cost of placing a comparable buried enclosure.

Corning and Charles Industries Introduce Fiber Pedestal Enclosure Corning Cable Systems (www.corning.com/cablesystems) and Charles Industries (www.charlesindustries.com) announced the availability of Corning's OptiTect Premier Sealed Local Convergence Point (LCP) Enclosure in a custom-designed pedestal from Charles Industries.

The enclosure is a prestubbed, preconnectorized enclosure that provides protection from environmental conditions. It is designed to enable centralized splitting architectures to distribute up to 144 fibers in a sealed environment. It is now available in a Charles Industries pedestal designed to house the sealed enclosure.

Since the enclosure's feeder and distribution cables are sealed and tested in factory-controlled conditions, no new personnel, training or tools are required to ensure installation and re-entry. **BBP**

VENDOR SPOTLIGHT:

Alcatel-Lucent www.alcatel-lucent.com
APA Cables & Networks www.apacn.com
Charles Industries www.charlesindustries.com
Corning Cable Systems www.corning.com/cablesystems
Optibase www.optibase.com
Verimatrix www.verimatrix.com