



Protecting Your Investment

Network Interface Device for Residential Application

An innovative network interface device advanced CommScope towards market leadership in the residential FTTH-for-Cable-Operators market. The patented product delivered simplicity and major serviceability features for CommScope, the leading communications infrastructure provider. Egret Technologies' novel design resulted in speedy development cycle, leading to an early market introduction within two quarters of the initial concept.

Situation: To support the growth of the FTTH (Fiber-to-the-Home) broadband market, CommScope, the industry leader in optical and coaxial cable products, required a protective enclosure known as a Network Interface Device (NID) for its award winning BrightPath product line. Network Interface Devices are designed to perform many functions, and a well-designed product will:

- Protect the internal active components from the harsh weather environment
- House the connection between the fiber optic cable and the optical-to-electrical high-speed micronode
- Provide a mechanism for electrical grounding
- Ensure consumer electronics safety protection (e.g. UL, TUV, CE)
- Enable subscribers or field technicians to view diagnostic information, while shielding the electronics and connections
- Ease installation and routine maintenance of the equipment

In a residential setting, the NID enclosure must provide all of these functions at a very low cost while blending easily into exterior aesthetics of a home.



Solution: Egret Technologies provided functional and design features that ensured a simple NID enclosure, reducing installation and operating cost, and speeding the new product to market. The patented design had the following unique benefits:

- Subtle aesthetically pleasing enclosure with cable management features to support multiple optical fiber drop cables, facilitate splice management and a serviceable

optical fiber connector interface to the optical-to-electrical micronode

- Secure enclosure prohibiting service theft and interference with the device
- Visual indicators for ease of installation and service verification installation features
- Low cost and ease of manufacture

“Turning Innovation Into Profit” Results: Egret Technologies creative design strategy,

engineering expertise, and rigorous attention to manufacturability, resulted in more than 60% product cost savings over comparable commercial off-the shelf (COTS) NID enclosures for the network infrastructure provider. John Williams, CommScope’s Optical Solutions Director said, “Egret Technologies gave us a winning strategy in record time. They delivered the product on target and at the aggressive target cost.”

Egret Technologies is a superior electronic design partner to global vendors of technology products. We are an innovative, solution-driven, US-based engineering design firm specializing in optical, electronic, and mechanical hardware, as well as embedded software systems. We provide concept development, product design and project engineering. Contact Egret Technologies at (954) 518-9645 or Innovate@EgretTechnologies.com

