Aurora Networks Doubles Upstream Capacity with New Digital Return Technology

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Company innovates use of former broadcast television spectrum to add cost-effective upgrade tool for cable operator networks

CHICAGO, IL - June 14, 2011 - Aurora Networks, Inc., announces today the release of its Universal Digital Return technology that provides cable operators with the opportunity to double their return path capacity using the recently reclaimed broadcast television spectrum. This technology will be unveiled at the Cable Show 2011, June 14-16, in Chicago.

Building on the company's highly successful digital return technology, Aurora Networks developed the Universal Digital Return to address the growing need for more bandwidth in the upstream. By utilizing the 54-88 MHz spectrum that was once reserved for analog broadcast television, the Universal Digital Return module expands the upstream bandwidth to 5-85 MHz, essentially doubling today's standard North American offering of 5-42 MHz.

Digital return is the only practical way to achieve the high link performance required by a fully loaded 5-85 MHz upstream pass band and utilizing 64-QAM (or the even more efficient 256-QAM) DOCSIS® 3.0 upstream bonded channel technology, independent of distances beyond 100 km. Instead of a laser, an analog-to-digital converter undertakes the hard work in digital return technology. Network engineers can easily deal with variations in loading and link distances.

What Aurora Networks says
"With the demand for more upstream capacity, Aurora Networks has innovated to cost-effectively remove this bottleneck and still meet the ever-increasing upstream performance requirements," said John Dahlquist, vice president, marketing. "The beauty of digital return technology is the independence of RF loads and required laser performance. Digital return technology provides operators with a cost-effective pathway to meet performance requirements that are currently not achieved by today's upstream analog lasers."

Universal Digital Return Benefits

- **Deploy Today, Upgrade Later** – Driven by the needs of today's high-demand services, operators increasingly face pressure to provide customers with increased upstream bandwidth capacity. Aurora Networks Universal Digital Return technology simplifies the transition to a higher split return by also supporting today's standard 5-42 MHz return path. The Universal Digital Return module uses a common platform for all band-splits (from 5-42 MHz, to 50 MHz, to 65 MHz and to 85 MHz) and then "personalizes" them for not only the band-split required but also for other

features, such as "1-fer" versus "2-fer", data transmission speed and operational modes, according to the specific network requirement. By including all of the required capabilities in one platform, operators may implement those features required to support their current requirements, like 5-42 MHz today, and transition to 5-85 MHz tomorrow by simply changing out the inexpensive personalization module.

- **Optimizes Fiber Deep (Node plus 0) Architecture** – The architectural makeup of a Fiber Deep deployment eliminates the need for RF amplifiers, providing huge cost-savings for operators who are transitioning their networks to accommodate greater downstream and upstream capacity per subscriber. By combining Universal Digital Return with Fiber Deep, operators have a much simpler path to increased bandwidth-per-subscriber since they only have to upgrade the node. To reach the same outcome with a traditional HFC architecture would require the replacement or upgrade of three to four times as many active devices (nodes and RF amplifiers), without achieving any of the operational savings of a Fiber Deep architecture
- **More Efficient Node Segmentation** – Today's ever-growing demand for more bandwidth continues to drive operators to increase their capacity-per-subscriber with node segmentation as the fastest and easiest option. With up to two unique RF input channels per Universal Digital Return transmitter, up to 15 wavelengths with CWDM, and up to 40 wavelengths with DWDM, Aurora Networks provides the flexibility for very fiber-efficient node segmentation solutions. In addition, through cable's first and only SFP-based digital return technology, the process of wavelength selection, sparing and service restoration is greatly simplified.

Aurora Networks will be located in CableNET® at the Cable Show.

About Aurora Networks

Aurora Networks is evolving cable by focusing on innovative solutions that build future-proof networks to accommodate the cable subscriber services of today and tomorrow. Aurora Networks is the only pure-play optical transport solution provider that is focused solely on cable operators. Using its proven understanding of cable networks, Aurora Networks delivers unique solutions - such as its Fiber Deep architecture and digital return technology - to address specific issues of the cable industry. A technology leader driven by innovation and industry-firsts, Aurora Networks enables leading cable operators across the globe to compete with a cost-effective, optimized launch pad for next-generation cable services. To learn more about Aurora Networks' core cable solutions, please call 408-235-7000 or visit www.aurora.com.