

**□□□□□□ Nokia adds capacity and density to industry leading copper FTTx portfolio to help operators meet ultra-broadband demand**

□□□□□□□□□□



**NOKIA**  
Connecting People

- Nokia provides operators with higher density options for delivering ultra-broadband services with new application-specific integrated circuits (ASIC) for G.fast and VDSL2 solutions

**□□□□□□ - Nokia is adding new ASICs to its leading portfolio of G.fast and VDSL2 solutions to give operators greater flexibility for delivering ultra-broadband services. Utilizing next-generation in-house vectoring processors from Nokia, the enhanced access nodes provide operators with more FTTx options for delivering ultra-broadband access to customers.**

Operators are evolving their access networks to bring higher speeds to customers and deliver on the promise of ubiquitous coverage. However, with vastly different technology challenges across their network, operators need the flexibility to choose the right solution that allows them to address each unique business case and overcome challenges involved with delivering ultra-broadband services.

Nokia's higher density access nodes for G.fast and VDSL2 can help operators accelerate FTTx deployments and connect more people, sooner. Optimized for performance, the second-generation ASICs provide additional vectoring processing power and efficiencies needed to eliminate cross-talk interference between copper lines and improve data speeds. This allows for very large vectoring groups to be applied to VDSL2 applications in cabinets or central offices as well as G.fast application in large multi-dwelling unit (MDU) or FTTN locations, helping to lower costs per subscriber and reduce the amount of infrastructure needed to service a given area. Capable of supporting a mix of VDSL2 and G.fast line-cards in same platform, the new chipsets based on Nokia Bell Labs innovations and over 12 years of vectoring experience provide greater density options for operators. Nokia provides operators with greater flexibility for delivering ultra-broadband services to customers with a 96-port option for G.fast micro-node deployments and a 384-port VDSL2 35b/Vplus option for a single chassis.

Nokia is also introducing new options for copper platforms that allow operators to achieve a single technology, vectored VDSL2 network. Called Long Reach VDSL2 (VDSL2-LR), the technology allows operators to extend the performance of their VDSL2 technology to all subscribers over any length of copper loop. This can help operators gain 25% better service levels over ADSL2+ for long loops and achieve similar performance to VDSL2 17a on medium to shorter loops. Helping operators extend their copper investments and move to a single DSL network through a simple ADSL line card replacement, VDSL2-LR can reduce network operation costs and provide the foundation needed to deliver broadband services over similar distances achieved with ADSL2+.

**Teresa Mastrangelo, principal analyst at Broadband Trends said:** "We are seeing a growing number of operators using FTTx technologies like G.fast to quickly deliver new ultra-broadband services and meet customers demand for gigabit services. Solutions like Nokia's higher density FTTx technology options can give operators the additional capacity, scale and flexibility they need to address various use cases and cost effectively extend ultra-broadband services to more people, quickly."

**Federico Guillén, president of Nokia's Fixed Networks, said:** "As demand for FTTx technologies like G.fast grows in areas like EMEA and APAC, operators will need flexible options that allow them to easily scale their networks in line with demand. Nokia's new chipsets allows operators to cost effectively connect more people sooner and accelerate ultra-broadband deployments with higher density G.fast or VDSL access nodes."

### **About Nokia**

Nokia Bell Labs, we serve communications service providers, governments, large enterprises and consumers, with the industry's most complete, end-to-end portfolio of products, services and licensing.

We adhere to the highest ethical business standards as we create technology with social purpose, quality and integrity. Nokia is enabling the infrastructure for 5G and the Internet of Things to transform the human experience. [nokia.com](https://nokia.com)

\*\* NOKIA