

50G-PON gets testing debut at Broadband Forum interoperability 'Plugfest'

The market availability of solutions to support the next generation of fiber networks has been accelerated thanks to interoperability testing of 50G-PON and 25GS-PON technologies.

The latest Broadband Forum 'Plugfest' marked the first time that 50G-PON – or Higher speed (HS-PON) – were tested at the interoperability event series, and the second time for 25GS-PON. The Plugfest was held in conjunction with [LANPARK](#) and [AT&T Labs](#)' at the latter's Plano, Texas facility.

Some of the biggest fiber technology vendors gathered to test the interoperability of their PON (Passive Optical Network) equipment with emulated networks. Participating companies included [Adtran](#), [Broadcom](#), [Calix](#), [CIG](#), [Cortina Access](#), [Gemtek](#), [Lambda Networks](#), [MT2](#), [Nokia](#), [Sagemcom](#), and [Vantiva](#).

"It's crucial that the industry prioritizes interoperability, co-existence, and collaboration to help broadband service providers excel with the next generation of PON technologies," said Broadband Forum CEO Craig Thomas. "Following the success of the [previous Plugfest](#), it was great to see the industry come together again to advance both 25GS and 50G-PON technologies thanks to the participation of the vendors and involvement of LANPARK and AT&T Labs."

The aim of the latest Plugfest, part of a multi-year interoperability testing series in laboratories around the world, was to give vendors an opportunity to ensure their equipment is interoperable with and ready to be deployed when connecting homes and businesses to broadband service providers' core networks.

The Plugfests are open to vendors of optical line terminal (OLT) and optical network unit (ONU) equipment, PON chipsets and software stacks, Residential Gateway devices directly incorporating a PON interface, and test and measurement equipment.

"During the Plugfest, AT&T Labs emphasized the importance of interoperability in diverse operator networks to enable a multivendor broadband ecosystem," said Sumithra Bhojan,

Director-Member of Technical Staff at AT&T Labs. “This is critical as PON technologies evolve. The Broadband Forum plays a key role in fostering collaboration among operators, silicon, optics, software, and equipment suppliers, ensuring seamless integration and innovation across the ecosystem.”

“At each Plugfest, we see significant interoperability improvements between the products presented by manufacturers,” said Thierry Doligez, CEO of LANPARK. “This demonstrates the importance of these testing events and the relevance of the PON interoperability program conducted by the Broadband Forum.”

25GS-PON TC-PMD Layer was tested for the second time at a Plugfest and, for the first time, 25GS-PON OMCI and 50G-PON TC-PMD Layer was tested – signaling the industry’s intent to be prepared to supply future fiber networks. Feedback from participating vendors has been instrumental in refining test plans, organizing future Plugfests, ensuring continued program improvement, and the overall success of the test events.

The next Broadband Forum PON Plugfest will be hosted by the LANPARK Laboratory in Tours, France, from July 7 to 10, 2025. The Plugfest will test XGS-PON, 25GS-PON, and 50G-PON. For more information, visit: <https://www.broadband-forum.org/event/broadband-forum-pon-plugfest-at-lanparks-laboratory-july-7th-10th-2025>.

The following event will be hosted by The University of New Hampshire InterOperability Laboratory (UNH-IOL) from October 6-10, 2025. For more information, visit: <https://www.broadband-forum.org/event/broadband-forum-pon-plugfest>.

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About the Broadband Forum

The Broadband Forum is an industry-driven global standards development organization helping operators, application providers, and vendors deliver better, services-led broadband.

As the industry-recognized center of competence, the Broadband Forum provides an accessible, efficient, and effective community where all broadband stakeholders can collaborate on, develop, and promote open standards and open software. This provides the basis for deployable solutions for the global broadband industry.

The forum publishes interoperable standards and open software, has launched certification programs, and promotes industry education. These best practices and models can be adopted to help realize an effective broadband ecosystem that drives a thriving, services-led broadband industry based on global collaboration, open standards, and open source, maximizing value for all stakeholders.

For more information, visit <https://www.broadband-forum.org/>. For the latest updates, follow Broadband Forum on [LinkedIn](#), [Twitter](#), and [YouTube](#).

About LANPARK

LANPARK is an independent laboratory located in Tours, France, specialized in conformance, interoperability and coexistence tests of devices deployed by telecom operators in the access network (PON), by DSOs in Smartgrids, smart gas & water grids networks using powerline or RF communications (G3, Wize), and by the industry for CCTV (PowerEOC). With many OLT brands installed in its labs, LANPARK offers on-demand test services dedicated to PON network operators, addressing their needs in terms of qualification and interoperability tests for each specific network they operate. LANPARK is a Broadband Forum's Approved Test Laboratory, accredited to conduct the worldwide recognized BBF.247 certification tests for G-PON, XG-PON and XGS-PON terminals.