



Nokia Passive Optical LAN for hospitality

Deliver a superior guest experience with a powerful LAN solution up to 50% cheaper than traditional Ethernet

Guests expect a wide range of information, entertainment and communications services that can be easily accessed whenever they need them. And they expect staff to be able to respond to their needs quickly by leveraging all available network services.

Passive Optical LAN (POL) technology can support all guest services and hospitality management operations on a single network. Then precious staff resources can focus on providing the 'WOW' factor rather than managing the network.

Passive Optical LAN outperforms Ethernet LAN

POL brings the LAN up to light speed. It uses fiber-optic cable instead of copper and the Gigabit Passive Optical Network (GPON) transmission protocol. GPON is used to deliver commercial and mission critical broadband services to millions of users worldwide. It outperforms Ethernet in all the key criteria:

- **Capacity.** GPON delivers 2.5 Gbps upstream and 1.2 Gbps downstream on each fiber so you can converge separate networks, eliminate bottlenecks and deliver gigabit speeds to every user
- **Cost.** POL is both cheaper to install and cheaper to run than an Ethernet LAN
- **Security.** GPON provides military-grade security and carrier-grade reliability
- **Longevity.** Fiber is future-proof, robust and scalable, providing value for 50+ years
- **Flexibility.** Deploy anywhere as fiber supports a smaller bend radius than copper cabling and is resistant to signal and noise interference
- **Simplicity.** GPON is a mature technology, designed for simplicity and efficiency, easy to understand and manage

Reduce costs from day one

POL costs significantly less than a traditional Ethernet LAN. For example, in a new installation with 2,000 connections across 10 floors, CAPEX savings are 56% and OPEX is lower by 54%. Which makes POL a sound investment for both upgrades and greenfield deployments. Savings come from the following areas:

- **Operations.** Maintain a single network by converging voice, video, data, surveillance, access control, security, and Wi-Fi® onto one simple, centrally-managed LAN
- **Energy.** POL equipment needs less power and cooling
- **Cabling.** Fiber is cheaper to install and easier to maintain than copper. It's also more efficient: fewer cables are needed to connect users and deliver services
- **Real estate.** Reclaim server rooms and additional floor space with smaller and fewer network elements and replace bulky copper bundles with space-saving fiber
- **Expansion.** POL covers 200x more area than Ethernet, making for easy expansion to new campus sites or floors
- **Long-term.** Fiber is more resilient than copper and is the only medium with unlimited bandwidth potential

Improve the guest experience and hotel operations with a passive optical LAN

POL is an industry-leading ultra-broadband fiber technology suitable for all properties – from small boutique hotels to business hotels and sprawling luxury resorts and convention centers.

The higher performance of a Nokia Passive Optical LAN can be used to improve connectivity, reach and bandwidth offered to guests, especially business users, thereby encouraging a higher spend on in-room and on-premises communications and entertainment services.

POL's future-proof capacity enables voice, TV and video, Wi-Fi®, room access control, digital signage, security and closed-circuit television and many other services to be converged onto a single network. As a result, it's easier and cheaper to keep these services up and running. Network maintenance is also optimized because there are fewer active electronics on site.

Nokia POL infrastructure requires less cabling, fewer racks, LAN switches and patch panels. This eliminates the need for telecom equipment closets on each floor or at every 100m as well as extra power supplies, air-conditioning and special cable channels. As a result, POL enables large savings on capital and operating expenditure. And the floor space freed up by eliminating unnecessary equipment can be used more productively.

Nokia: bringing broadband innovation to hospitality

Nokia is the world leader in fixed access technologies. We have 20+ years of broadband experience, and our equipment powers some of the most advanced fiber networks in the world.

The Nokia Passive Optical LAN solution is designed to help you enhance the guest experience and slash costs. Contact your nearest Nokia partner today.

POL vs Ethernet LAN: cost comparison for 2,000 end-points over 10 floors

