



Hybrid Passive Optical LAN for business critical network

Alcatel-Lucent Enterprise Hybrid POL is a mixed architecture that takes advantage of Passive Optical LAN and Ethernet LAN to provide cost savings and better network performance.

Brochure

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Alcatel-Lucent
Enterprise



Alcatel-Lucent Enterprise Hybrid POL solution

Alcatel-Lucent Enterprise Hybrid POL (Passive Optical LAN) solution leverages a single fiber link to **deliver enterprise services with high bandwidth and low latency to large customer premises across long distances**. Hybrid POL solution **connects the core and the access layers of an ALE Ethernet LAN through a Nokia POL infrastructure**, with one or several split levels.

For **customers with large premises and demanding networking services**, Hybrid POL results in an optimization of the cabling and active equipment infrastructure, while retaining all the Ethernet services for enterprises.

Hybrid POL benefits

Superior performance, optimized infrastructure



State of the art networking services

The access switches at the edge of the POL provide for LAN networking services, and for **higher IP port density and HPoE budget** where needed. The option of redundant uplinks in the switches makes the network **redundancy possible at all network layers**.



Easy network management

Centralized management for both POL and Ethernet LAN with the Nokia & Alcatel-Lucent Enterprise network **powerful and user-friendly management systems**. Provides **highly scalable network evolution** capabilities.



Cabling reduction

The use of Optical Network Terminals (ONTs) and small-factor access switches at the POL edge, which can be installed closer to the endpoints, leads to a **reduction of the copper cabling horizontal runs, and eliminates the need of dedicated telecom closets and cooling systems**.



Infrastructure cost savings

The point-to-multipoint optical infrastructure leads to the **removal of the distribution switching layer in dense installations**, with the consequent **reduction of costs in switching infrastructure**.

Last generation Wi-Fi for enterprises

The OmniAccess Stellar WLAN access points provide **enterprise-grade Wi-Fi** with the latest Wi-Fi standards supported in top of the POL.



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Do you need Hybrid POL?

ALE HPOL is the ideal solution for enterprises and organizations with large premises. Typically for networks in one or several buildings, over long distances, for medium to high user density, and with advanced networking and Wi-Fi requirements.



Large installations

Customers with **large and extra-large premises**, in one or several buildings, and long distances, require an optimization of the underlying network infrastructure.

Hybrid POL benefits

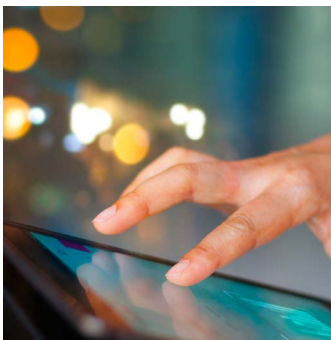
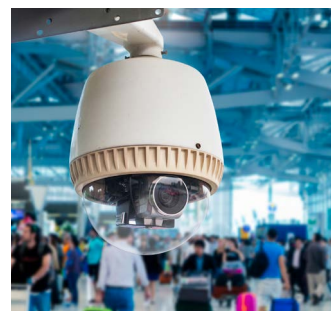
Reduces installation and maintenance costs with less cabling and active equipment.

High performance

Customers with high density of users, applications and IoT devices have **demanding requirements regarding bandwidth, reliability, security and services.**

Hybrid POL benefits

Guarantees evolution from 2.5 Gbps to 10/40 Gbps networks. Implements state-of-the-art **security** standards and advanced networking services, with **full redundancy at all network levels.**



Hybrid POL benefits

Supports Wi-Fi 5 and Wi-Fi 6, with an **efficient Wi-Fi backhaul** today and in the future.

Enterprise grade Wi-Fi

Customers needing pervasive Wi-Fi, capable to **support real-time applications, with high performance in dense environments** and high-quality outdoor coverage.

Recommended architectures

Nokia POL solution (with SFP ONT)
combined with **Alcatel-Lucent OmniSwitch** access switches and **OmniAccess Stellar** access points.

- ✓ Full redundancy at all network layers
- ✓ Advanced networks features (SPB, ERP, MACsec etc)
- ✓ Unified access
- ✓ PoE/PoE+ and Hi-PoE
- ✓ High IP port density
- ✓ IoT enablement, management and inventory

Nokia POL solution (with ONT)
combined with **OmniAccess Stellar** access points.

- ✓ Redundancy at all network layers is not required
- ✓ Basic network features
- ✓ Unified access is not required
- ✓ Only PoE/PoE+
- ✓ Low IP port density
- ✓ IoT connectivity



Alcatel-Lucent Enterprise Hybrid POL key differentiators

Combined benefits

- Future-proof fiber investment
- LAN and WLAN enterprise-grade features
- Redundancy possible at all layers
- Flexible and scalable design
- Centralized management

Cost savings

- Active equipment, fiber and copper cabling optimization
- Power consumption and real estate space savings

Single vendor for end-to-end solution

The most complete offer
in the market combining
Alcatel-Lucent Enterprise
and Nokia technologies