Ona Hotels Sóller Bay in Spain is gearing up for market-leading position with Zyxel GPON End-to-End Solutions

Ona Hotels Sóller Bay, a well-known 4-star hotel in Mallorca, Spain, was searching for future-proof, all-in-one solutions to upgrade its existing internet infrastructure for better WiFi coverage, higher bandwidth capacity, and connection speeds. With the comprehensive product portfolios and decades of broadband expertise, Zyxel Communications partnered with Grupo Royal Telecom, the local system integration vendor of the hotel, to provide Ona Hotels tailored GPON End-to-End Solutions.

Originally using an Ethernet network with limited bandwidth and speeds, Ona Hotels struggled in accommodating the growing numbers of connected devices and satisfying customers with the latency-sensitive premium services. Moreover, lacking a voice, video, and data all-in-one solution with Element Management System (EMS) support obstructs the hotel from efficiently monitoring and managing its network in real-time.

The GPON End-to-End Solutions consist of Zyxel OLT1408A 1U Pizza Box 8-port GPON OLT and PMG5622GA Dual-Band Wireless AC ONT Gateway with RF overlay. The OLT1408A supports a split ratio of up to 1:128 which guarantees the quality of each signal transmitted through it and supports

Ona Hotels Sóller Bay's Challenges
- Inadequate WiFi performance for increased devices and services
- Multiple services through different deployments cause inconvenience
- Lack of an all-in-one system for managing and monitoring network

Zyxel solutions
- Zyxel pizza-box type OLT1408A with split ratios of up to 1:128 provides a scalable access platform supporting various access interfaces to ensure smooth network upgrades to 10G and above

high-density deployments. Incorporating both Ethernet and fiber technologies in one platform, the OLT1408A meets the expectations of the hotel in integrating the new GPON network from the existing Ethernet network. Moreover, the power-efficient and temperature-hardened features of OLT1408A allow superior deployment flexibility and saves maintenance costs.

Fully interoperable with OLT1408A, the PMG5622GA extends fiber access and enables seamless wireless connectivity across the hotel with the optimized dual-band Front-End Module (FEM) design. Supporting RF overlay technology, the PMG5622GA enables legacy CATV services via GPON network, ensures uninterrupted data traffic, and helps the hotel simplify the technical maintenance with lower operating costs.

Both the OLT1408A and the PMG5622GA support the Zyxel NetAtlas Element Management System (EMS), a centralized, scalable network management platform. With Zyxel-specific parameters, the NetAtlas EMS system provides network-wide, real-time visibility and user-friendly monitor interface that enables remote configuration, diagnosis, and monitoring. With the system, hotel IT staff can quickly control device failures and contact service providers to fix the issues.

"Zyxel is a brand we know of and their products and solutions are always preferred. By the end of the project, we can see that we have selected the right solution," said Raul García, IT Manager from Ona Hotels Sóller Bay.

By implementing Zyxel's GPON End-to-End Solutions in the Ona Hotels Sóller Bay's network, Grupo Royal Telecom was able to provide the hotel guests with seamless internet experiences from corner to corner and open more opportunities with substantially improved facilities. The solutions also open the possibility for network development and smooth migration to WiFi 6 deployment.
The collaboration between Zyxel and Grupo Royal Telecom not only demonstrates Zyxel's capabilities to provide customer-oriented and cost-effective solutions but also helps Grupo Royal Telecom establish a reputation for network deployment in the vertical markets.

Zyxel solutions
- Zyxel dual-band Wireless ONT PMG5622GA supports internet, wireless, VoIP and CATV signals
- Zyxel NetAtlas EMS with multi-site networking access and easy management

Core benefits
- Upgrades the existing LAN network by simply adding Zyxel's equipment
- Remote configurations, fault diagnosis and performance monitoring of the OLTs and ONTs from the central site via Zyxel NetAtlas
- High-speed internet, steady WiFi connectivity, and uninterrupted voice service via PMG5622GA
- PMG5622GA plays as GPON terminal which reserves space and enables flexibility
- Provides future network capacity expansion possibility

Featured products

OLT1408A
1U 8-port Pizza Box GPON OLT

- 8 ITU-T G.984-compliant GPON ports; each port supports up to 128 ONT
- 4 x 10GbE/2.5GbE/GbE ports (SFP+/SFP, fiber)
- Dual power module plus battery charger
- Temperature-hardened

PMG5622GA
Dual-Band Wireless AC GPON HGU with 4-port GbE LAN and RF Overlay

- RF overlay enables traditional CATV video services through GPON networks
- Superior coverage with unique concurrent dual-band wireless circuit design
- 802.11n WLAN for superior performance and coverage
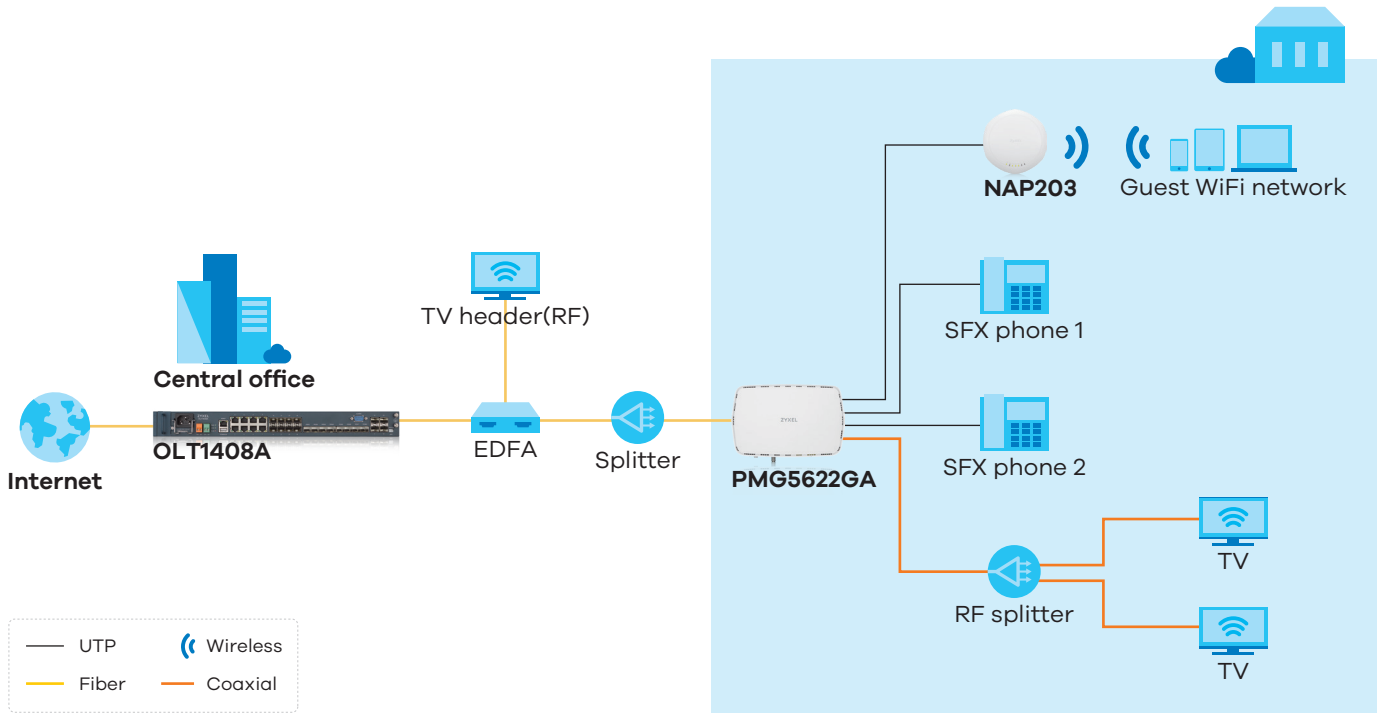- Auto-provisioning and management through EMS along with OMCI

NetAtlas EMS
NetAtlas Element Management System

- Advanced system management, network configuration, performance monitoring, fault detection, and security control features
- Up to 3000 NE or 2M DSL ports
- XML/SOAP northbound interface

Application diagram

Internet — Central office — OLT1408A — EDFA — Splitter — PMG5622GA

TV header(RF) → EDFA

PMG5622GA connects to:
- NAP203 → Guest WiFi network
- SFX phone 1
- SFX phone 2
- RF splitter → TV, TV

Legend:
- UTP
- Wireless
- Fiber
- Coaxial

Customer story Ona Hotels Sóller Bay