



## Success Story

Orion Mall Deploys Zyxel DSLAM and CPE to Provide Shoppers and Merchants with Data and Voice Solution



Shopping  
Mall



Orion Mall



South India



Data & Voice  
Solution

## Overview

### Challenges

- Provide data and voice connectivity over existing telephone cable
- Enhance network security, bandwidth management, and content filtering for internal staff
- Provide Wi-Fi connectivity inside shops
- Ensure Internet connectivity in fail-over mode with two ISP link
- Provide uninterrupted, stable, and secure Internet access for all internal staff

### Benefits

- Compliance with environmental constraints through the use of existing telephone network
- Comprehensive security and management solution
- Stable, high-performance network
- Ability to handle heavy user traffic
- Remote provisioning and management
- Achieve better management with new technology
- Flexible solution that is "future-proof"

### Solutions

- 48-port Temperature-Hardened ADSL2+ Box DSLAM
- Unified Security Gateway
- Wireless N ADSL2+ 4-port Gateway with USB

"We have chosen Zyxel solutions for implementation mainly due to the long-term presence of the brand on the Slovak market and the positive customer feedback when working with these devices. The price-to-performance ratio of the device in comparison with that of other brands also played an important role in the choice of the Zyxel brand. We have been very satisfied with our choice of Zyxel solutions for several years."

Venkat Raju  
Managing Director of Octel Networks Pvt.Ltd

## Background

The Orion Mall is located in “cyber city” of Bangalore in southern India, and is backed by the construction and mall development credentials of the Brigade Group. Orion Malls have the ability to attract top-tier Indian and international retail brands.

The Orion Mall brand quickly established itself as a leader in its category, winning multiple awards to its credit, spanning the entire gamut of mall operations. The mall chain has carved out a niche for itself as a premium player with strong franchise value. Orion malls have become an essential part of their community’s social fabric.

The company’s strategy is to develop and operate superior retail destinations across major cities and fast growing towns by integrating fashion, food, leisure, and entertainment with unique features to better connect retailers with consumers.



## Challenges

The Orion Mall wanted to provide Internet connectivity for shopkeepers over the existing telephone lines for both voice communication and data.

The new infrastructure would be based around the latest networking products and solutions and needed to provide uninterrupted, stable, and reliable Internet access to all the shopkeepers and staff.

## Solutions and Benefits

With the goal of establishing both wireless and cable networks using the latest technology and end-to-end network solutions offered by Zyxel, the company’s experts conducted an extensive analysis to address information security and indoor Internet sharing needs.

The core of the network utilized a Zyxel 48 port IES1248-51 DSLAM, which provided both comprehensive management options as well as security to protect the network from data snooping and malicious attacks.

Along with the DSLAM, AMG1312 Wireless 802.11n ADSL 4-port gateways with USB were installed inside of every shop to ensure fast and reliable wireless network access.

Upon completion, the Mall gained a modern, stable, and reliable network solution.

To address the security concerns, a USG210 Next Generation Firewall was deployed that is capable of implementing network protection with SSL inspection, content filtering, application filtering, and bandwidth management. The device also provides UTM features such as Antivirus, IDP and AntiSpam.

Zyxel ZyWALL USG Advanced Series universal security gateway delivers high-access quality to help businesses satisfy demand for always-online communications.

The Zyxel USG210 Next Generation Firewall helps SMBs meet the connectivity demands of an ever-growing legion of wireless devices. Each gateway in the series is integrated with a WLAN controller that enables users to manage wireless access points (AP).

## Products Used

### IES-1248 -51 • 48-port Temperature-Hardened ADSL2+ Box DSLAM



- 1.5U, DC or AC power
- 48-port ADSL2+ with built-in POTS splitter
- 2 GbE combo interface for uplinks and subrending
- Hot-swappable fan
- Application Flexibility with Asymmetric Data Transport of 24 Mbps Downstream and 2.4 Mbps Upstream per Port
- 2-port Bonding as well as Loop Condition Diagnostic
- Feature Support
- Compliant with ITU, ANSI and ETSI Standards
- Deployment from CO, Cabinet or Basement, Multitenant Units/Multi- Dwelling Units

### USG210 • Unified Security Gateway



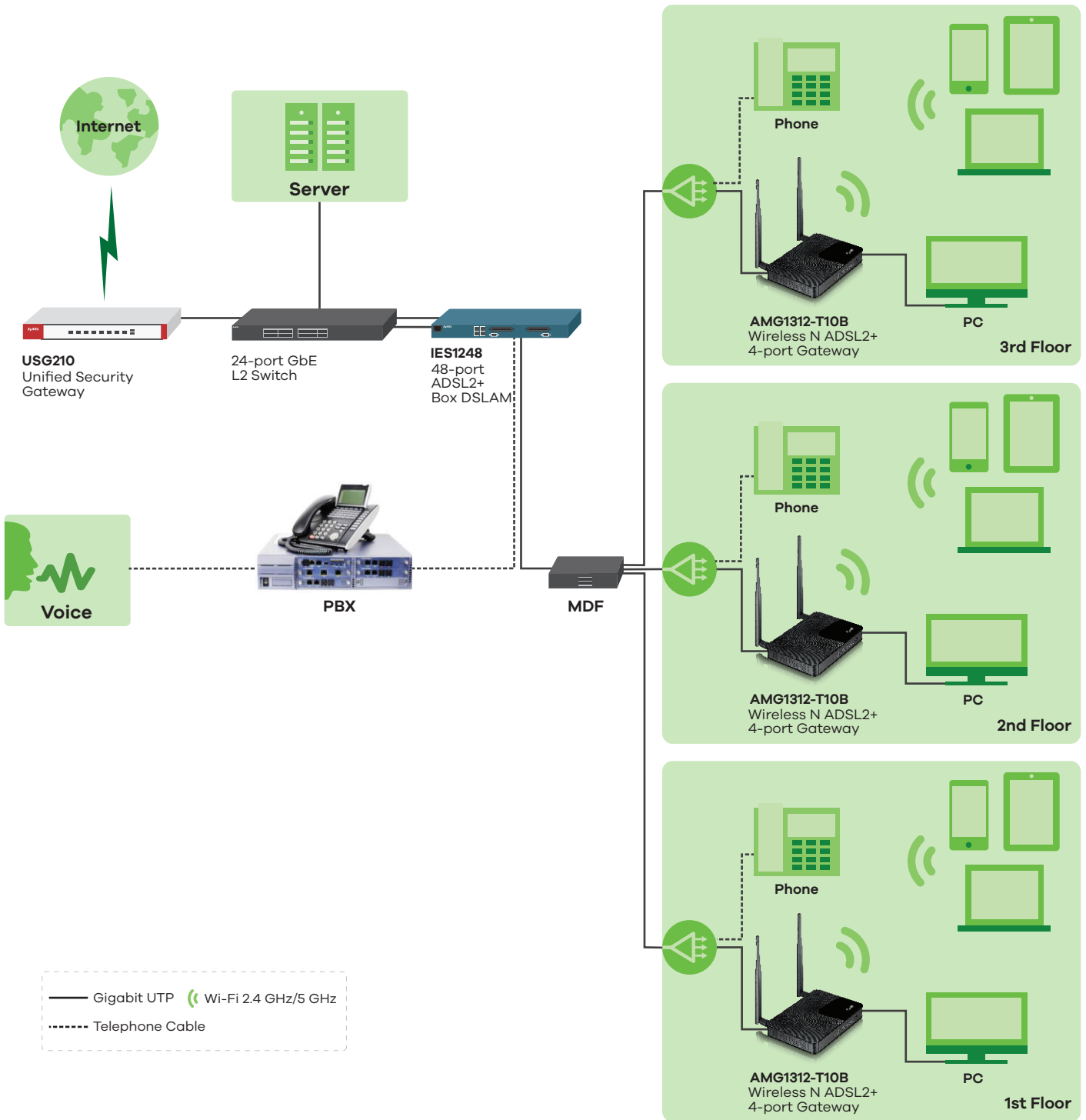
- IEEE 802.11 a/b/g/n dual-radio (2.4 GHz and 5 GHz) design
- Supports 100 concurrent logins by default and up to 200 via license upgrade
- Integrated account generator, Web-based authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- Built-in WLAN controller
- Facilitates compliance with data retention regulations
- SP350E Service Gateway Printer enables one-click account and billing generation
- SMS ticketing with ViaNett protocol support

### AMG1312-T10B • Wireless N ADSL2+ 4-port Gateway with USB



- 2.4 GHz 11n (2x2) for superior performance and coverage
- Configurable EtherWAN for optimized, evolutionary services
- Remote provisioning and management through TR-069
- Advanced QoS to ensure quality of Triple Play ROM-D feature for easy distributor/operator customization
- Always-online, always-compatible alternative 3G connection

## Diagram



### About Zyxel Communications

Focused on innovation and customer-centricity, Zyxel Communications has been connecting people to the Internet for nearly 30 years. Our ability to adapt and innovate with networking technology places us at the forefront of creating connectivity for telcos and service providers, business and home users. Zyxel is building the networks of tomorrow, unlocking potential, and meeting the needs of the modern workplace — powering people at work, life, and play. Zyxel, Your Networking Ally.

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