

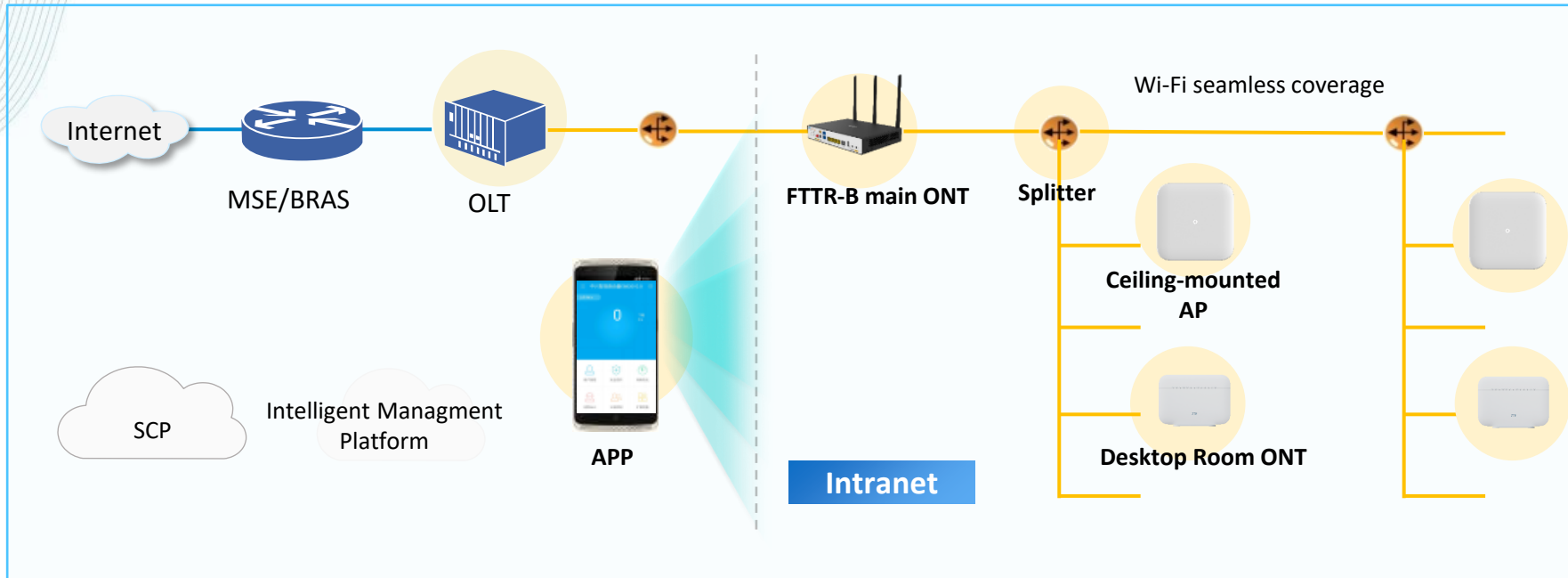


ZTE FTTR Solution - Wi-Fi in Hands, Experience in Mind

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ZTE Italia

6 advantages and one-stop satisfy SME network requirements



Components of FTTR-B SME Solution:

- ◆ FTTR-B main ONT
- ◆ Ceiling-mounted AP/ Desktop Room ONT
- ◆ ODN(splitter,fiber..)
- ◆ Management Platform

Six Advantages and One-stop Service SME Network Lookup ZTE

Function Full Integration

Experience Ultra Gigabit

Performance High Concurrency

Security High Assurance

Installation Electronic Control

Management Intelligent Control

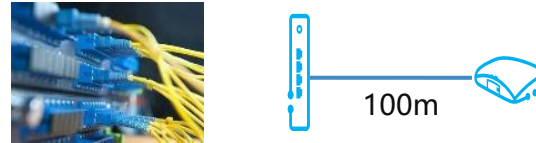
Requirements for SME networks

Low speed, poor experience



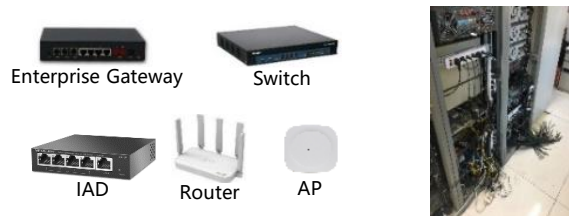
- ◆ The network cable bottleneck is difficult to meet gigabit upgrade.
- ◆ Multi-level cascading and bandwidth convergence

Limited transmission, poor coverage



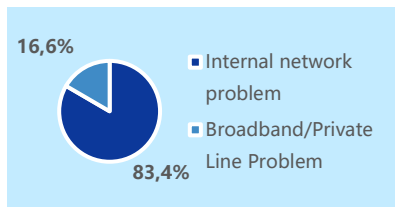
- ◆ The transmission distance of the network cable does not exceed 100 m.
- ◆ APs location are restricted, and it is difficult to implement panoramic wireless coverage.

Multi devices, high energy consumption



- ◆ Each device is connected to an external power supply, resulting in high power consumption and heat dissipation.
- ◆ A large number of devices occupy a large space in the cabinet or equipment room.

Self-built network, difficult to O&M



- ① Customer service consultation
- ② Trouble Ticket
- ③ Wait for allocation of after-sales support
- ④ On-site maintenance

- ◆ Complicated networking, and difficult fault location
- ◆ It is difficult to purchase AP devices through channels, and the process is complicated and responds slowly.

FTTR-B

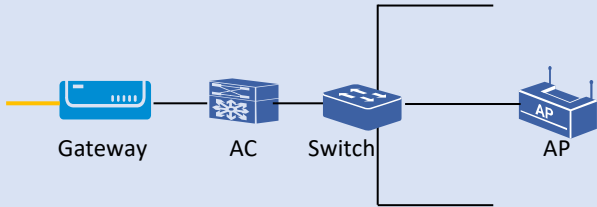
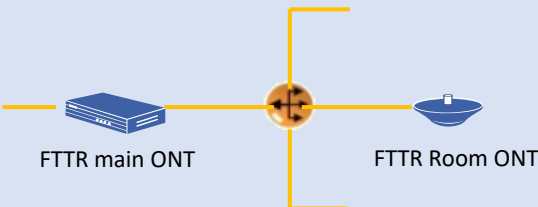
Panoramic gigabit+

Simplified architecture

One-stop I&M service

The FTTR-B SME solution solves all the above problems and provides the ultimate network construction solution for users.

Advantages of FTTR-B

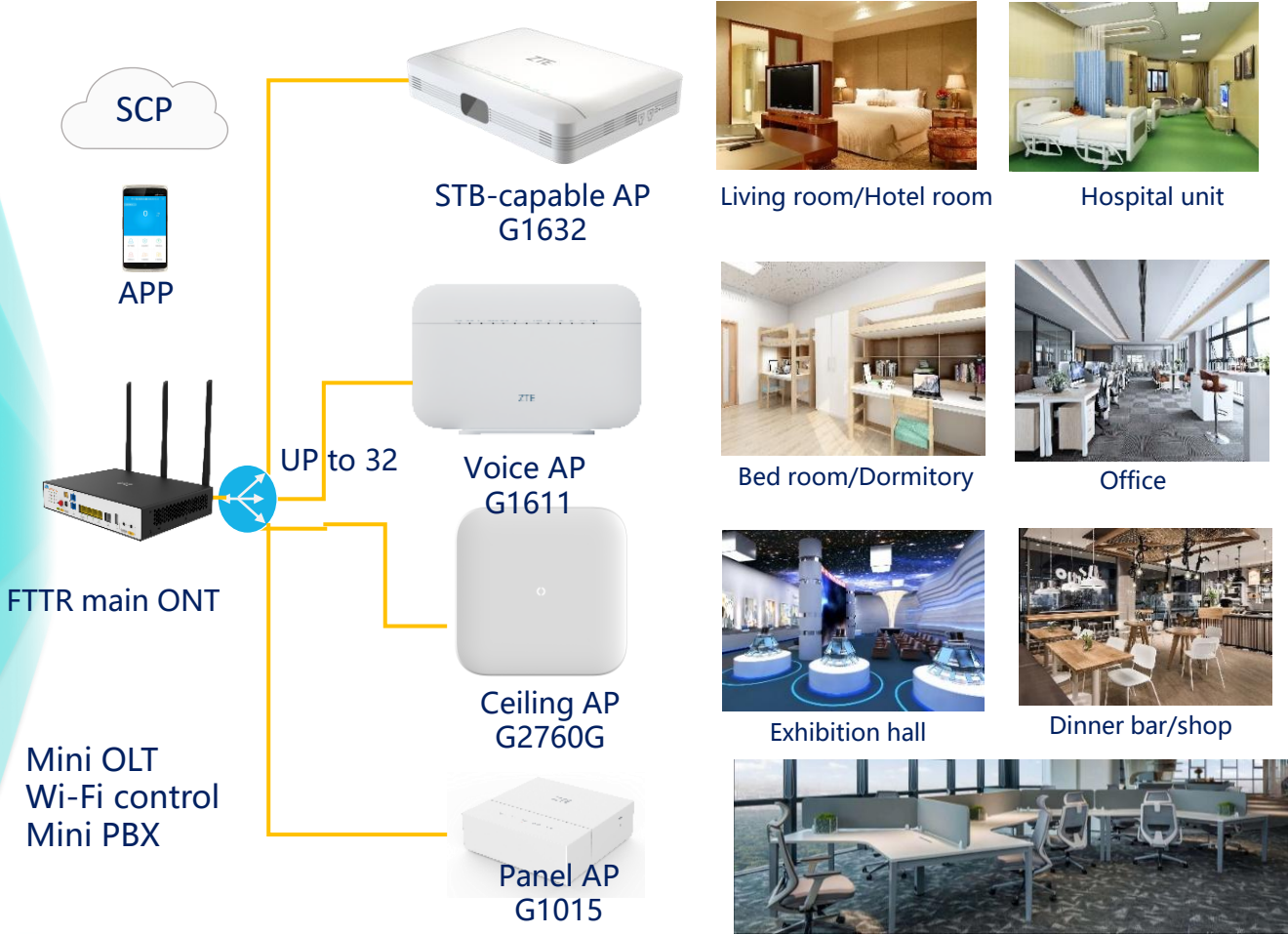
Item	Gateway +AC+ Switch +AP Enterprise Self-Networking Solution	FTTR-B SME Solution	FTTR-B Advantage
Network Architecture			
Network Architecture	4-layer architecture	2-layer architecture	Flatter network, easier maintenance
Transmission medium	Copper network cable, easy to be interfered, 10-year service life	All-fiber, green, interference-free, 30 years service life	Stable and reliable
Coverage distance	Less than 100 m. The distance increases, the network speed decreases.	2000 m, POF can reach 150 m	Farther coverage
Service experience	1000Mbps, Wi-Fi seamless roaming	2000 Mbps+ network speed, Wi-Fi seamless roaming	Higher bandwidth, multiple services
Comprehensive cabling	High cost and large space	Low cost (high POF cost) and space saving	Cost-effective
Equipment Cost	Independent hardware AC+ switch, medium cost	Saves AC and switch equipment, the cost is moderate.	Lower device cost
Network Attribute	enterprise, single-point connection, no stickiness	operator , network + service,	Higher stickiness
Network O&M	Enterprise self-maintenance, easy to complain, and difficult to locate problems	Operator maintenance, visual and manageable	Professional construction and O&M

FTTR Full Function Integration: One Room, One Fiber, One Optical

ONT Function: one room, one fiber, one optical end



Function 5-in-1



A FTTR-B Main ONT can be cascaded with four optical splitters, and each splitter can be connected with eight Room ONTs. There are a total of 32 Room ONTs.

A FTTR-B network supports 300 terminal concurrency, including mobile phones, computers, and tablets.

- Number of single device access : 128 (64 for 2.4GHz and 64 for 5GHz)
- Number of single device concurrent : 64 (average 5M bandwidth in the 5GHz band)
- Single device coverage area : Ceiling-mounted AP(100 -120 m²) or desktop room ONT (60-80 m²)

One-touch call: One-touch call on a phone at the front desk of a hotel or at a nursing station.

Video entertainment: The HDMI interface is directly connected to a 4K TV.

Gigabit+ Internet access: Wired and wireless dual gigabit networks.

Internal and external network voice: Public network large number + internal network small number, internal network free dial-up.

Online classroom, video conference: Gigabit+ bandwidth without stalling.

Mobile office: Panoramic mesh roaming, no perception of mobile office.

High-density access: Multi-terminal concurrency, peak hours, and network peace of mind.

Roaming without perception: Panoramic mesh roaming without perception.

Fiber to the desktop:

Pure wireline access, small and hidden

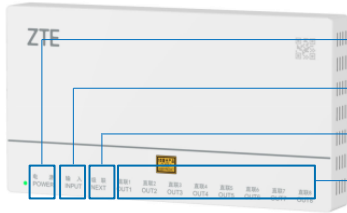
Office Desktop

PoF optoelectronic integrated two-piece set, the devices can be deployed remotely, long-distance power supply for worry-free.

Active splitter

1:9/1:8 active splitter

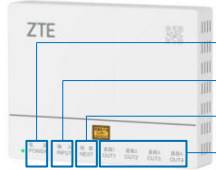
32 APs can be cascaded



- External power adapter input interface
- Uplink interface
- Cascading extension port (1:8 none)
- User port

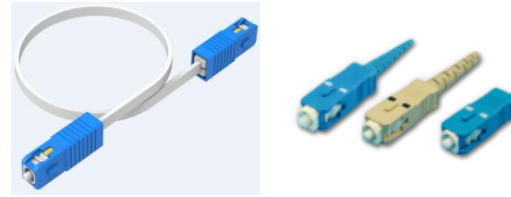
1:5 active splitter

16 APs can be cascaded

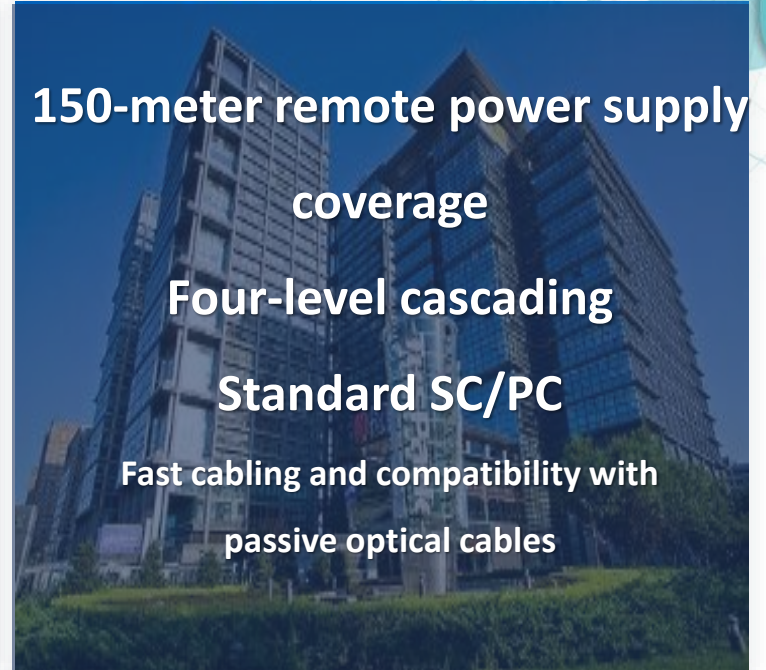


- External power adapter input interface
- Uplink interface
- Cascade Extension Port
- User port

Photoelectric composite cable



1.8*4.2 mm G.657A2 1-core +2*26 AWG
 Standard SC fiber connector
 5-150m multi-specification on-demand configuration



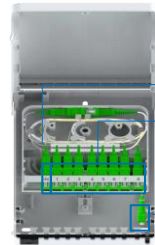
150-meter remote power supply coverage
 Four-level cascading
 Standard SC/PC
 Fast cabling and compatibility with passive optical cables



2000m coverage
 Four-level cascading
 Flexible Fiber Coverage

Passive splitter

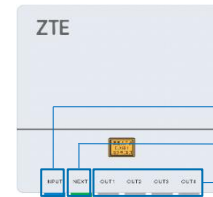
1:9/1: Eight Splitter Panel



- Uplink interface
- User port
- Cascading extension port (1:8 none)

32 APs can be cascaded

1:5/1:4 active splitter



- Uplink interface
- Cascading extension port (1:4 none)
- User port

16 APs can be cascaded

Transparent optical fiber



Flexible optical fiber with 5 mm bending radius.
 Open wires can also be hidden.

Street Store: FTTR-B extends operators market revenue



Scenario Description:

Restaurants, Coffee bar, Street shop, Business hall, Supermarket....
 Area < 300m² ; The peak passenger traffic < 128.

Services Requirement Analysis:

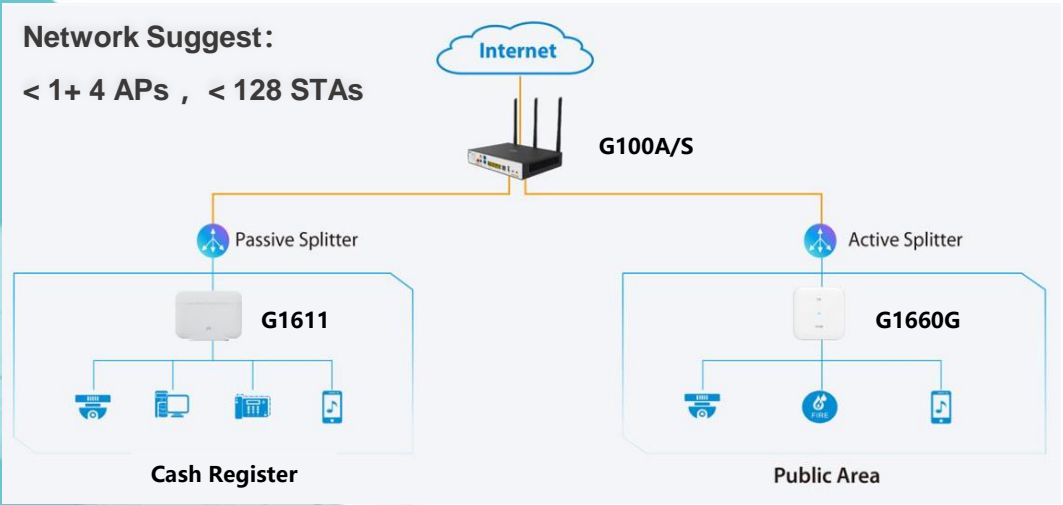
Internet: Mesh Wi-Fi full coverage, ETH access to the cash register system
 Security: IPC and security protection sensor access
 Voice: A customer service phone is available at the cash register.

Solution Highlights

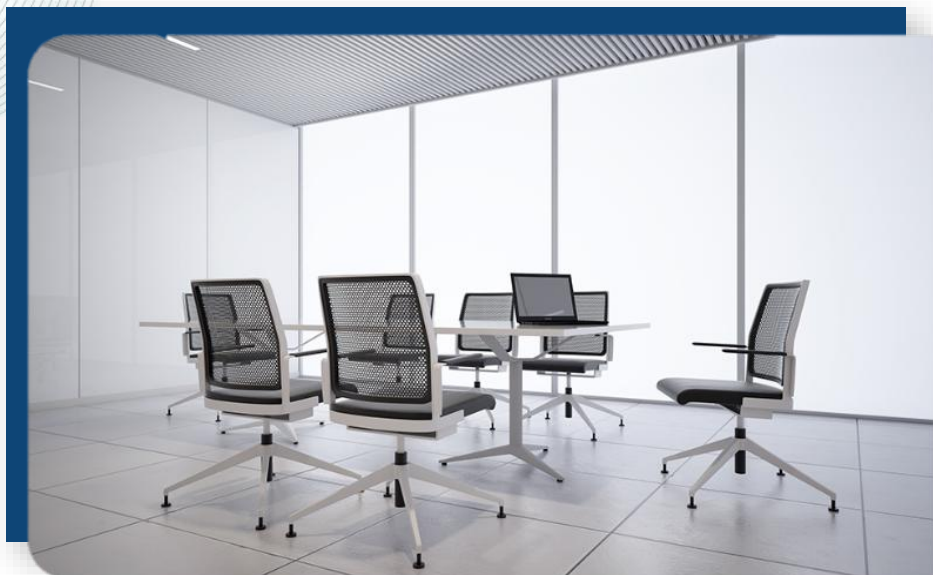
- High Speed & Security Wi-Fi**
 - Mesh Wi-Fi no blind area
 - Guest Wi-Fi with 2nd SSID
 - Local portal authentication
- Simplified deployment**
 - Plug & Play ONU
 - POF 120m power supply
 - Active splitter compatible with passive ODN

Customers Value

	Before	After
Network	ONT+ AP	FTTR
Mesh	×	√
Deploy	Customer	Operator
Lifecycle	★ ★	★ ★ ★
Δ Revenue	×	Devices + Services



SOHO: FTTR-B is promoting intelligent & digital office



Scenario Description:

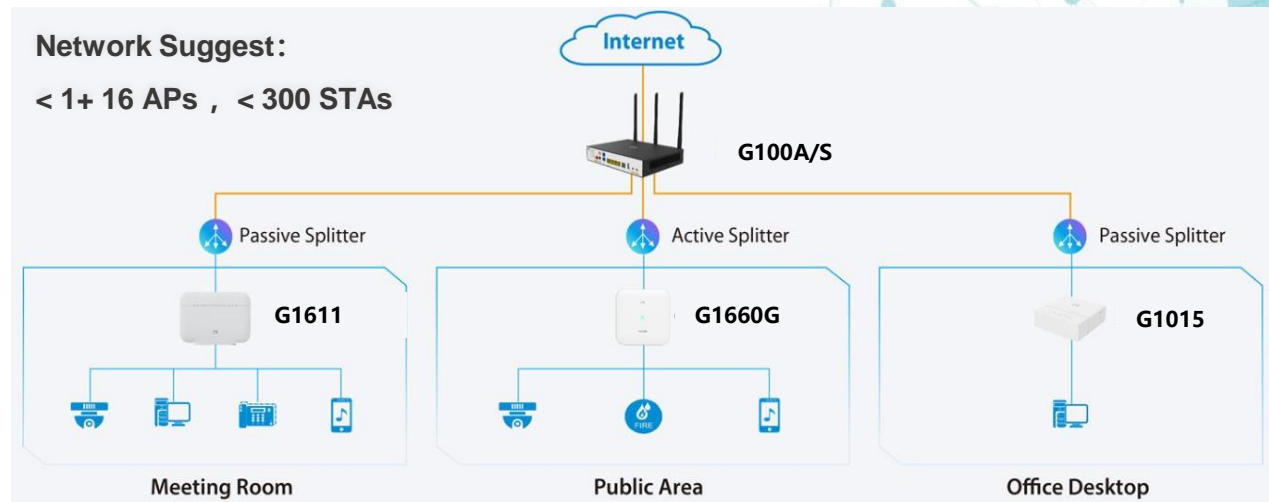
Small office, SOHO, Personal studio
 <4 floors, <300m²/floor, < 100 employees

Services Requirement Analysis:

Internet: Mesh Wi-Fi full coverage, Video conference, ETH access to the PC, printer, turnstile...

Security: IPC and security protection sensor access

Voice: Internal and external calls



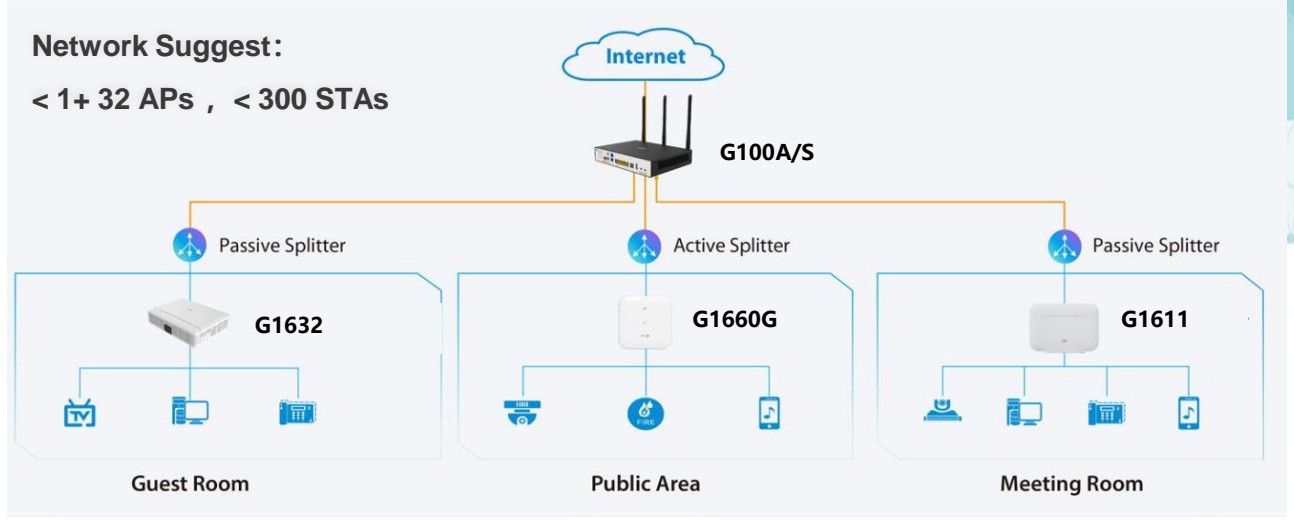
Solution Highlights

- Simplified & Green**
 - HSI + Voice + CCTV, 3-in-1 converged network, reduce 30% power consumption
- Ultimate Network**
 - Mesh Wi-Fi no blind area
 - 20ms smart roaming
 - Smart QoS schedule
- Safe and Reliable**
 - VPN for data encryption
 - Local portal for guest

Customers Value

	Before	After
Network	Switch+ AP	FTTR
Architecture	3 networks 3 layers	1 network 2 layers
CAPEX	★ ★ ★	★ ★ ★
OPEX	★ ★ ★	★
Lifecycle	★ ★	★ ★ ★
	O&M service	Value-

Hotel/Dormitory: One all-optical network, one ONT in one room



Solution Highlights

- Simplified & Green**
 - HSI + Voice + TV + CCTV , 4-in-1 converged network, reduce 30% power consumption
 - STB-capable ONT for guest room converged services
- Ultimate & Reliable Network**
 - Mesh Wi-Fi roaming
 - Local portal authentication
 - Smart QoS schedule

Customers Value

	Before	After
Network	Switch+ AP	FTTR
Architecture	4 networks 3 layers	1 network 2 layers
CAPEX	☆☆☆	☆☆☆
OPEX	☆☆☆	☆☆
Lifecycle	☆☆	☆☆☆
Δ Revenue	O&M service	Value-added services

Scenario Description:

Small hotel, Guesthouse, Dormitory/ Apartment
 <8 floors , <64 rooms

Services Requirement Analysis:

Internet: Mesh Wi-Fi full coverage, IPTV services

ETH access to the PC, STB

Security: IPC and security protection sensor access

Voice: Internal and external calls of the guest room/front desk