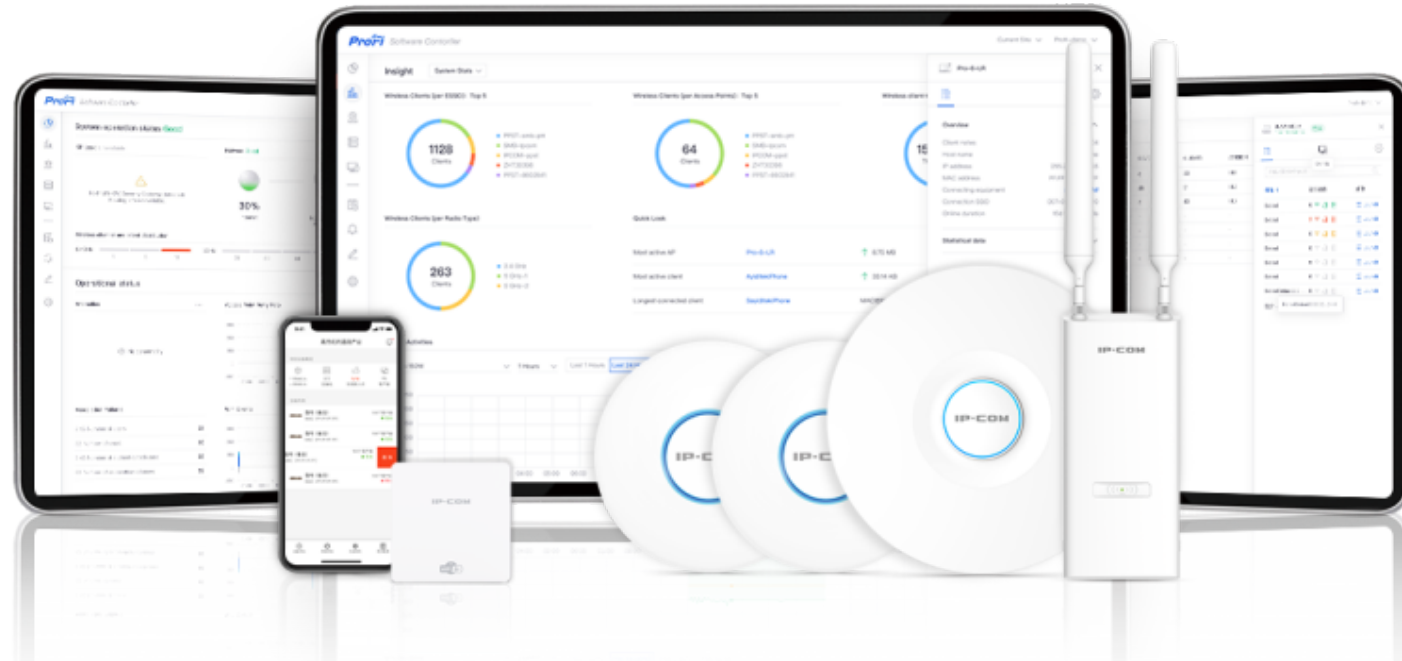


# IP-COM Chain Hotel WLAN Solution

——Chain Hotel

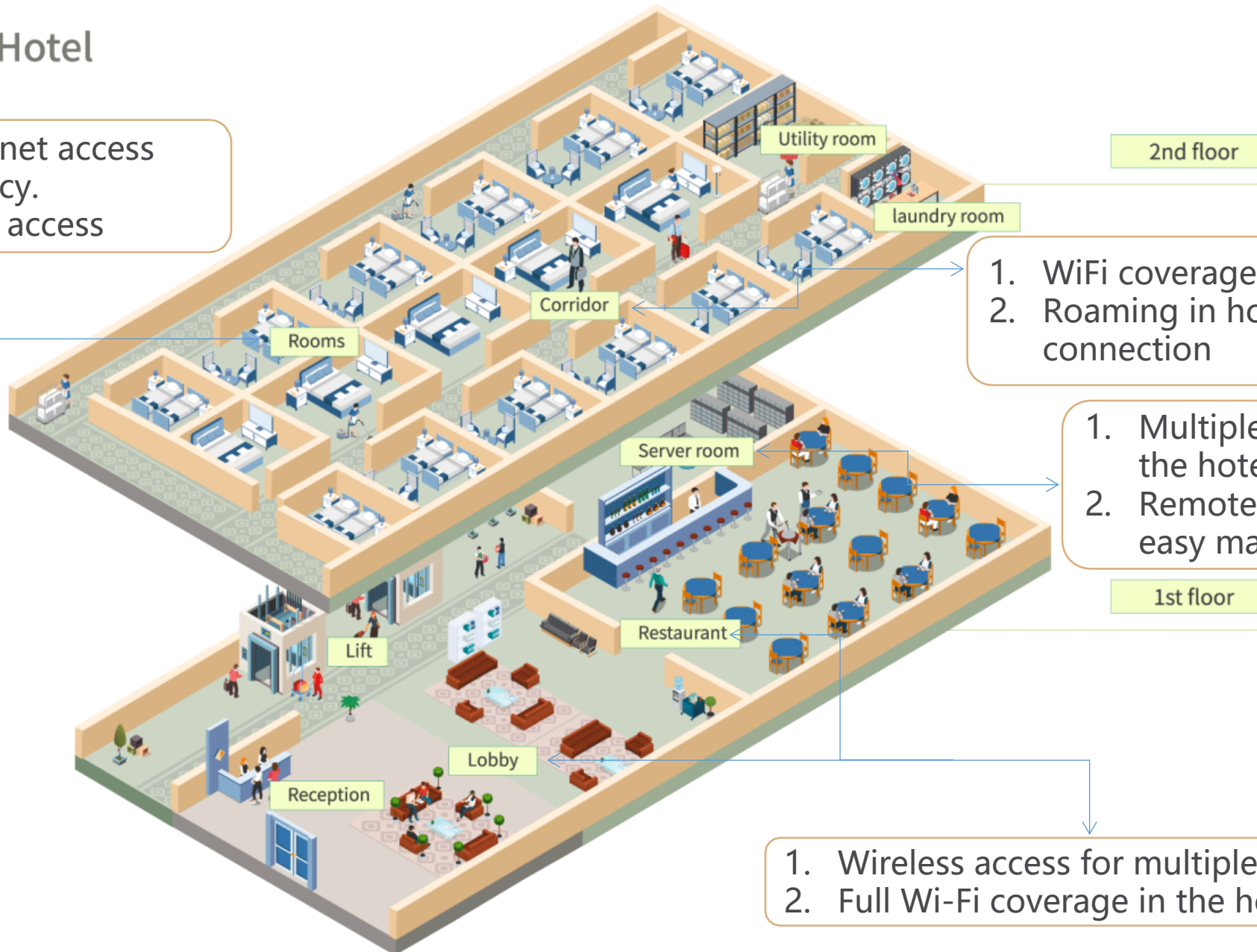


1. Requirements
2. Solutions
3. Benefits
4. Recommendations

# 1. WLAN requirements of chain hotel scenarios

## Chain Hotel

1. Smooth internet access with no latency.
2. Safe network access



1. WiFi coverage without dead zone
2. Roaming in hotels without losing connection

1. Multiple branches can share the hotel business system.
2. Remote management and easy maintenance.

1. Wireless access for multiple devices
2. Full Wi-Fi coverage in the hotel

# 1. Requirements Summary

1 Simple and reliable centralized management



2 Good internet security



3 Good WiFi experience



4 Simple maintenance and Low failure rate



1. Requirements
2. **Solutions**
3. Benefits
4. Recommendations



## 2. Solution——Key Locations Network Deployment



**Chain Hotel**



### Server room

- IP-COM Multi-WAN Hotspot Router M50 is designed for small- and medium-sized enterprises to implement intelligent network access and management. It offers an AP management system and a multi-authentication management system, and supports various enterprise-oriented functions including filter management, intelligent bandwidth management, PPTP/L2TP/IPSec VPN, and multi-WAN

## 2. Solution——Key Locations Network Deployment



**Chain Hotel**

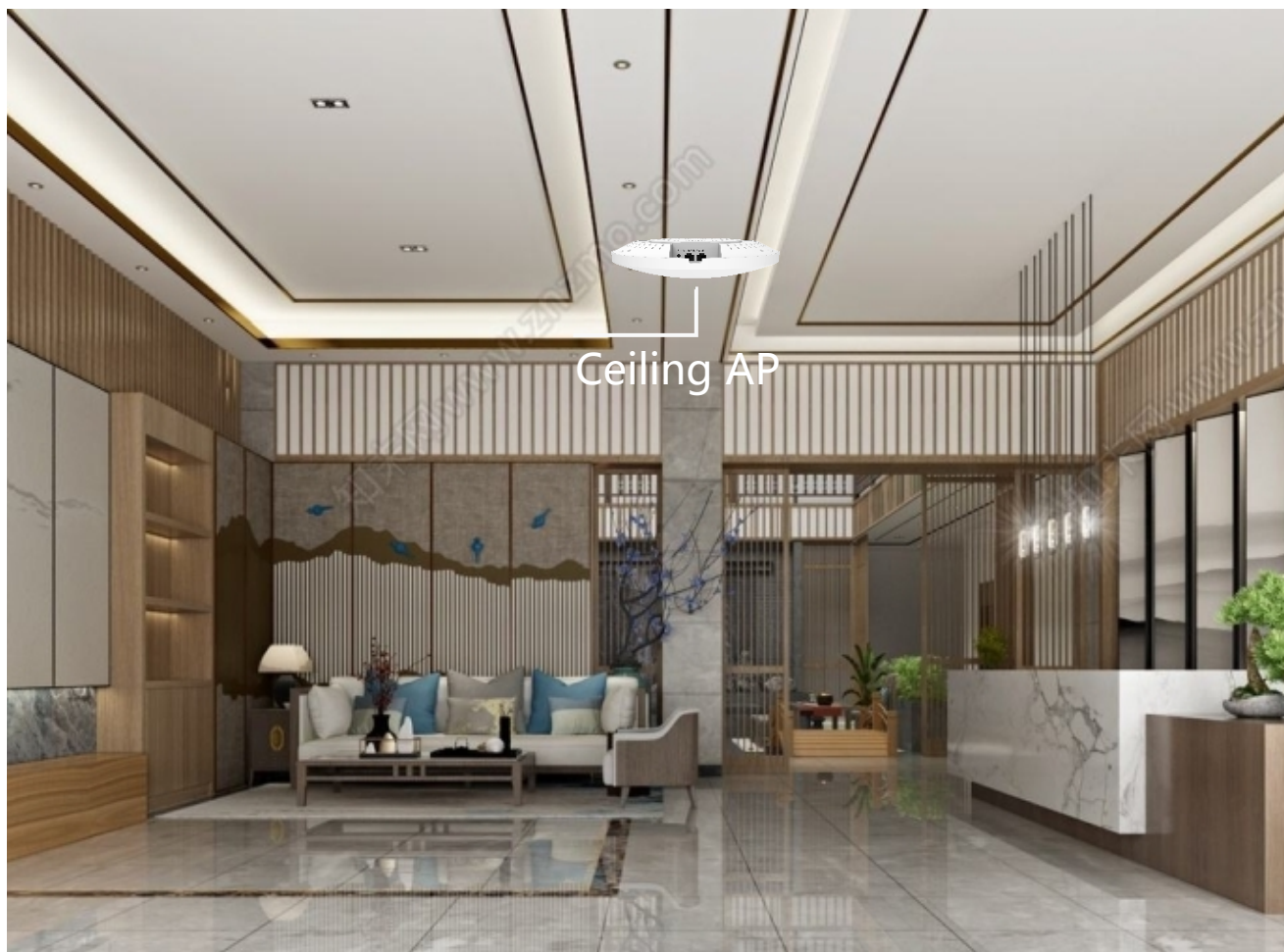


### AP Controller——AC1000

- IP-COM AC1000 is an AP controller, specially designed to manage quantities of APs in the network for SMB such as budget hotels, K-12 schools. Abundant wireless features management including editing AP's deployment location, SSID, Security key, RSSI threshold, Client limitation, VLAN, output power, Client isolation, SSID isolation, 5G band steering. Also it can monitor AP and clients online status. All these features help the administrator to install, manage and monitor APs at a single location.

# 2. Solution——Key Locations Network Deployment

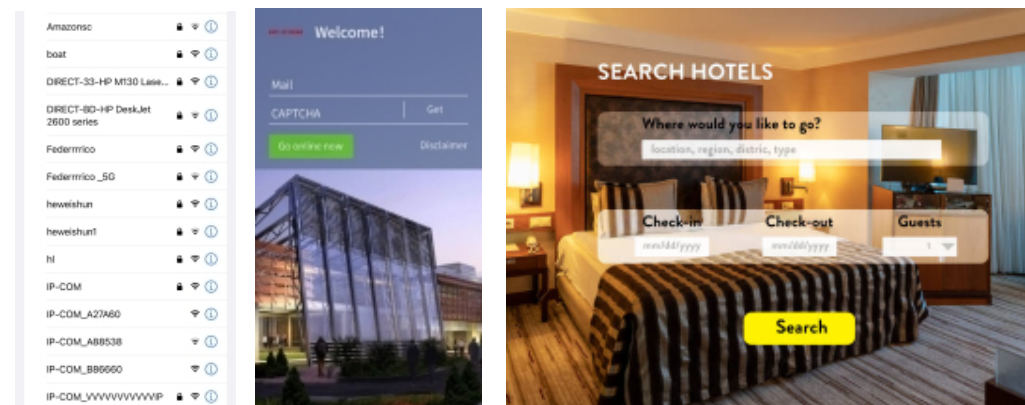
## Value-added Wi-Fi



### VLAN Mapping, Multi SSID

The hotel office network and the guest network use different SSIDs and access methods, and different SSIDs are mapped to different VLANs to ensure the data security of the office network.

### WEB authentication, Precise placement of advertising



Connect WiFi → WEB authentication → Pop up hotel advertisement

**Scene:** Large area and large number of access terminal devices  
**AP deployment:** dual-band ceiling AP for coverage



## 2. Solution——Hotel room

### Hotel room AP deployment: deploy a gigabit dual-band in-wall AP in each room

The hotel rooms are small in size with fewer connected terminal devices. One in-wall AP is deployed in each room, which not only meets the coverage requirements of a single room, but also improves the WiFi access experience in the room.



**Scene:** Small area, few terminal devices



### In-Wall AP

Elegant  
appearance

Stylish design with a wide range of colours to suit all decoration styles.

Easy installation

Supports PoE power supply and only requires one Ethernet cable.

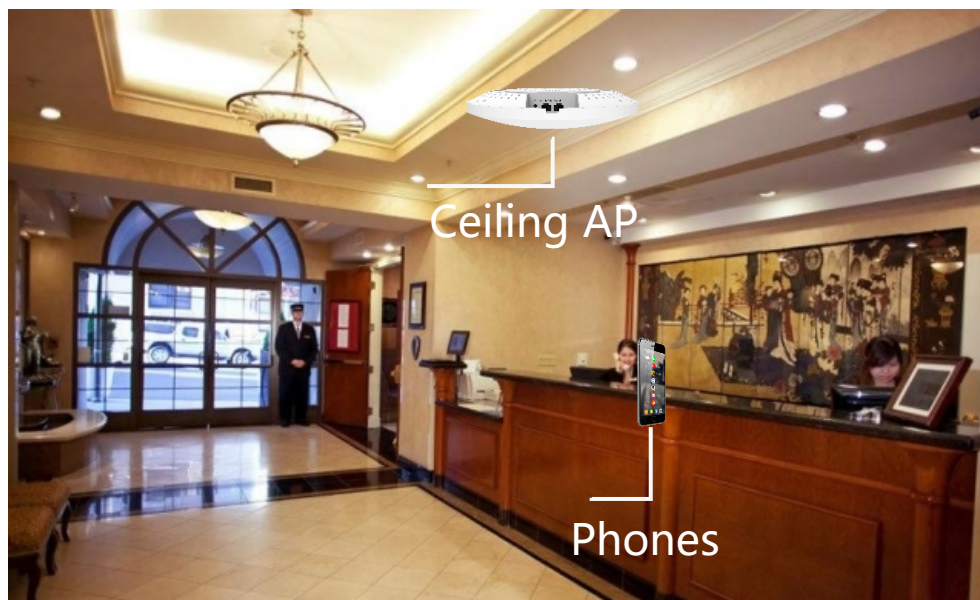
High speed

3000Mbps wireless rate without wall penetration

## 2. Solution——Public areas

**Corridor/public area AP deployment:** Deploy a **dual-band ceiling AP** every **15-20** meters

Use ceiling-mounted APs to ensure full coverage of the hotel's internal wireless network for Corridors and other indoor public areas of the hotel



**Scene:** large area and few terminal devices.

**AP deployment:** dual-band ceiling AP for coverage



Large coverage

High-power and high-gain omnidirectional antenna design, single AP coverage up to 500 m<sup>2</sup>.



**Ceiling AP**

Good roaming

It supports fast roaming protocols 802.11K, V, and R, and terminal devices can make smooth wireless switching.

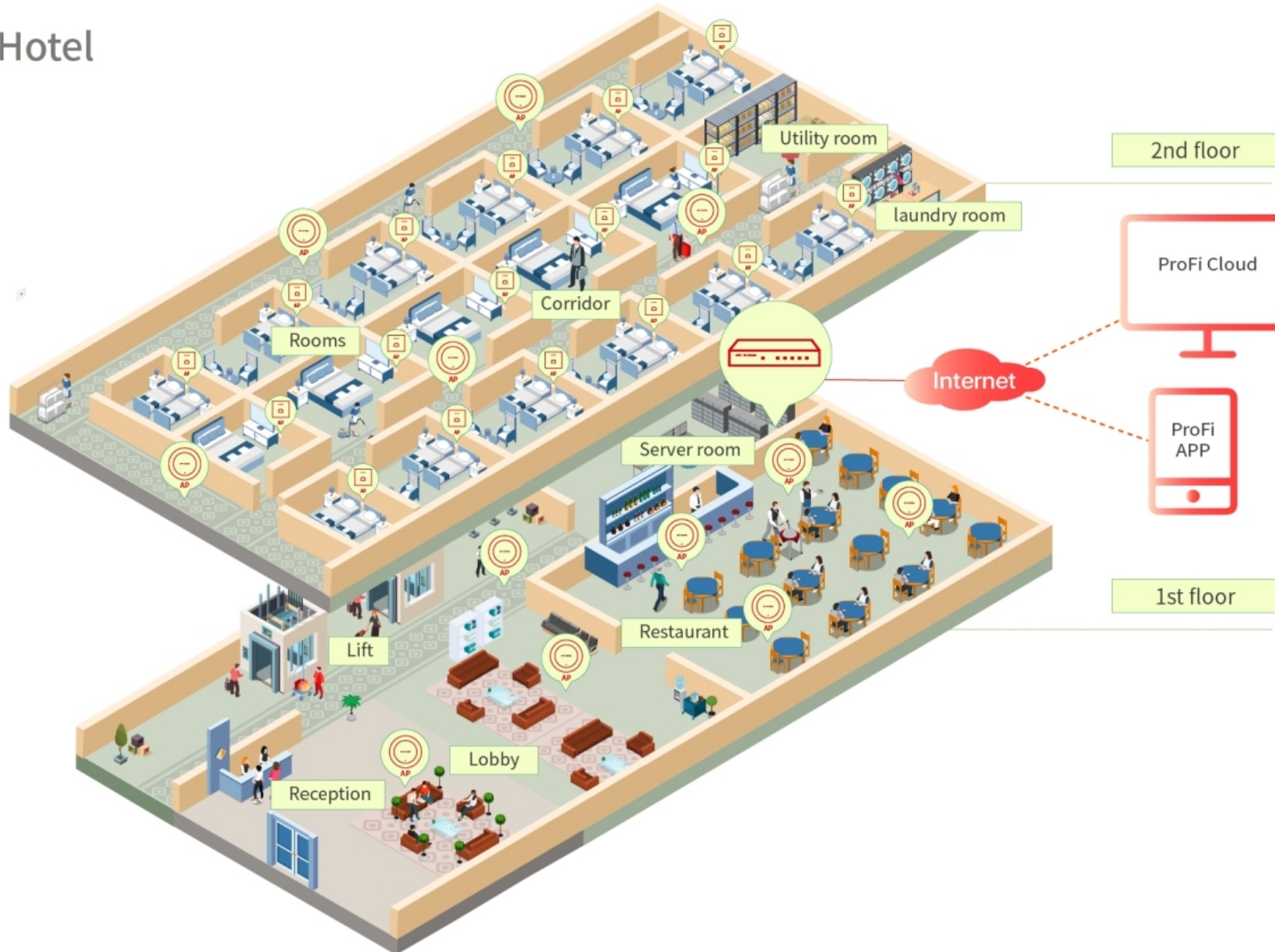


High speed

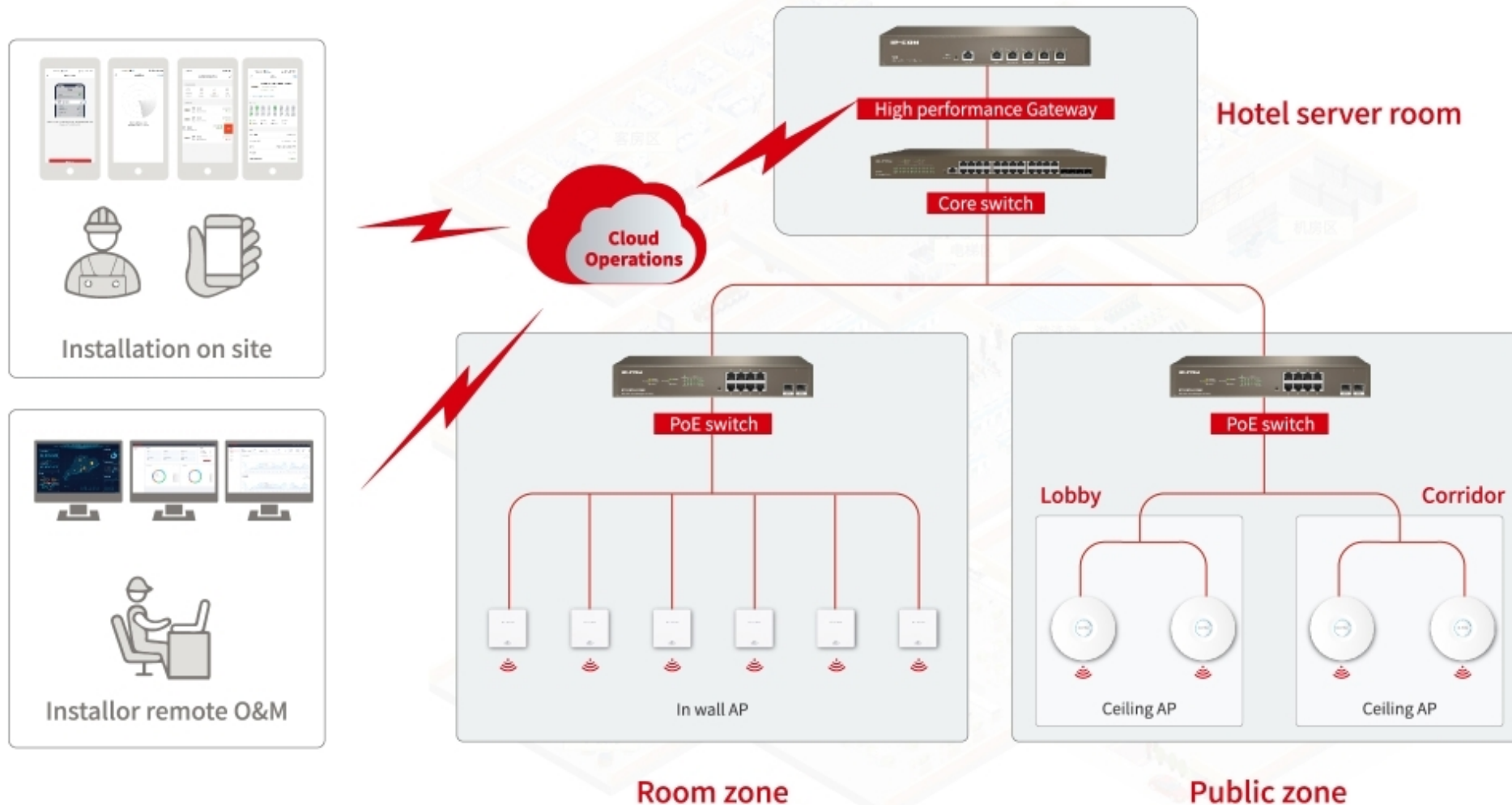
WiFi 6 standard, 3000 Mbps rate, WiFi access to high-speed network without lag.

## 2. Solution——General Design

### Chain Hotel



## 2. Solution——Network topology





1. Requirements
2. Solutions
3. **Benefits**
4. Recommendations

# 3. Benefits—Centralized Management



## Multi WAN Load Balance



M50 supports 4 WAN ports. It can realize bandwidth averaging between two WAN ports base IP Group. Also it reserve the possibility of bandwidth expansion in the future.

## Captive portal and PPPoE server



M50 integrates with captive portal service. A landing page will pop-up when mobile device connect to wifi network. Once username and password is provided, the user will be able to access Internet.

## Built-in AP Controller

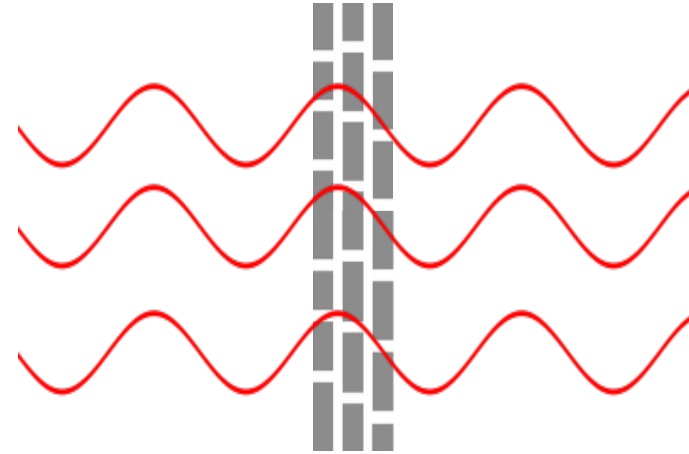


M50 intergrates with AP controller to manage all IP-COM indoor access point. It will discover AP automatically when AP connect into network. You can edit AP's deployment location, SSID, Security, Output power, client limitation for SSID, Schedule Reboot etc function on the WEB UI at a single location.

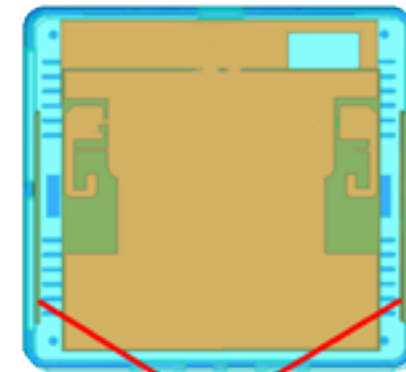
# 3. Benefits——Large WiFi coverage



High power and high gain  
**Better Penetration**  
Coverage without dead zone



**Dual band symmetrical PCB**  
**independent antenna**  
Higher antenna gain than traditional APs  
better signal  
larger coverage



**Dual band symmetric antennas**

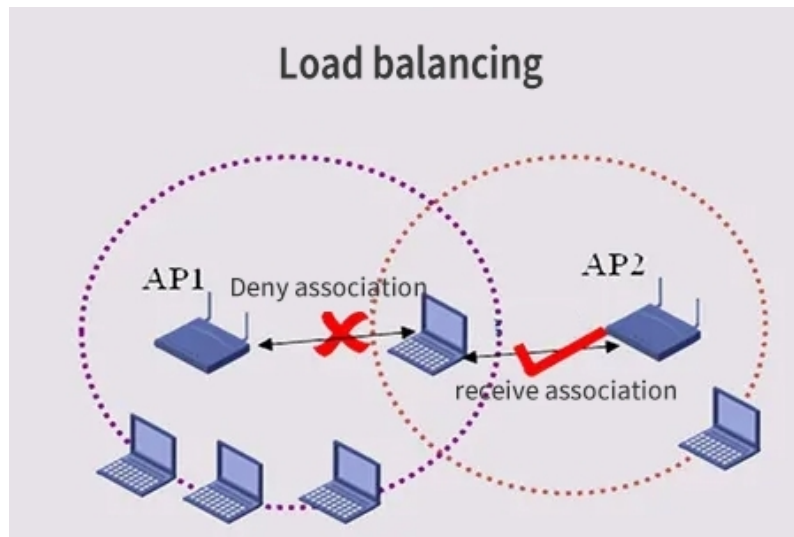
# 3. Benefits——High quality wireless experience

## Seamless roaming



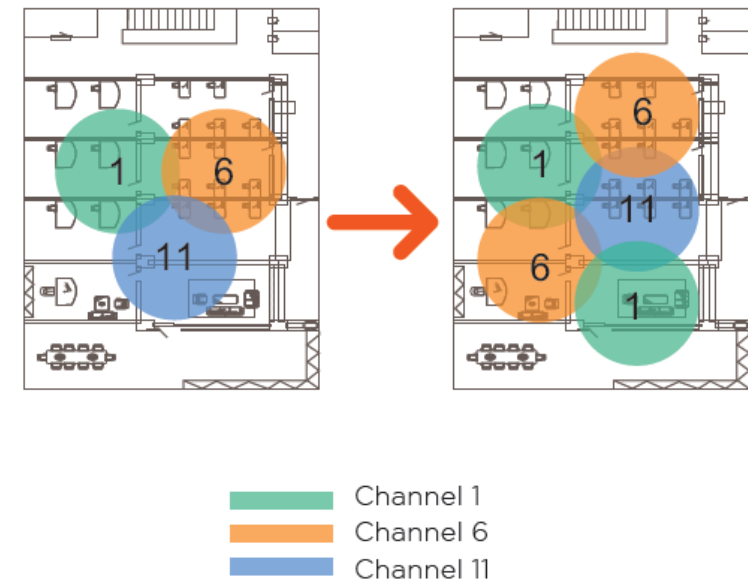
smooth switching

## Load balancing



Fit high-density environment

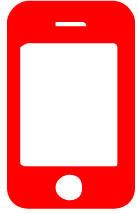
## Automatic channel optimisation



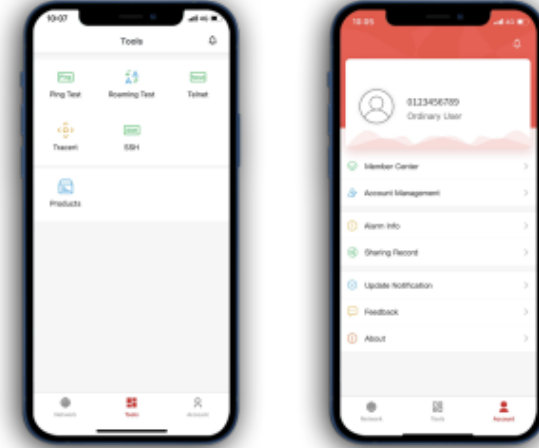
Automatically reduce  
inter-AP interference



# 3. Benefits——Easy to use, effortless project experience



**Only need a phone**



- Automatic pre-sales solution generation and online consultation;
- Gateway, switch, AP managed by APP  
APP One-key Network configuration;
- Engineering acceptance tests, e.g. signal, network speed;
- Automatic report generation



**Rapid negotiation, no struggle for solutions**



**Rapid deployment, simple operation and maintenance**









**Rapid acceptance, no delays in project delivery**







1. Requirements
2. Solutions
3. Benefits
4. Recommendations

# 4. Recommendations

## ——Cost-effective WiFi5 solution

Scene	Device	Model	Image	Features	Layer
Server room	Multi-WAN Hotspot Router	M50		<ul style="list-style-type: none"><li>• 5*Gigabit RJ45 ports, supports 4 broadband accesses</li><li>• PPPoE,WEB,SMS authentication</li><li>• Maximum user capacity: 200</li><li>• MAX AP Manage number:100</li><li>• Captive Portal: 300</li><li>• Smart Bandwidth Control</li></ul>	Core layer
Server room	AP Controller	AC1000		<ul style="list-style-type: none"><li>•Maximum AP managed number: 128</li><li>•5 Gigabit Ethernet Ports</li></ul>	Core layer
Hotel server room	Switch	G5328X		<ul style="list-style-type: none"><li>•24*Gigabit RJ45 ports, 4*10 Gigabit SFP ports</li><li>•Switch capacity 598Gbps</li><li>•DHCP server, Layer 3 dynamic and static routing, Cloud/App management</li></ul>	Core layer
Low voltage silo on floors	Switch	G3326P-24-410W		<ul style="list-style-type: none"><li>•24*Gigabit RJ45 ports + 2 Gigabit SFP ports</li><li>•PoE budget of whole device: 410W</li><li>•Cloud/App management</li></ul>	Access layer
Hotel room	In-wall AP	W36AP		<ul style="list-style-type: none"><li>•300Mbps+867Mbps</li><li>•2*Gigabit RJ45 ports</li><li>•18dBm+16dBm</li></ul>	Access layer
Corridor/Other public area	Ceiling AP	W63AP		<ul style="list-style-type: none"><li>•300Mbps+867Mbps</li><li>•1*Gigabit RJ45 port</li><li>•26dBm+26dBm</li></ul>	Access layer

# 4. Recommendations——High Performance WiFi6 Solution

Scene	Device	Model	Image	Features	Layer
Server room	Multi-WAN Hotspot Router	M50		<ul style="list-style-type: none"><li>• 5*Gigabit RJ45 ports, supports 4 broadband accesses</li><li>• PPPoE,WEB,SMS authentication</li><li>• Maximum user capacity: 200</li><li>• MAX AP Manage number:100</li><li>• Captive Portal: 300</li><li>• Smart Bandwidth Control</li></ul>	Core layer
Server room	AP Controller	AC1000		<ul style="list-style-type: none"><li>•Maximum AP managed number: 128</li><li>•5 Gigabit Ethernet Ports</li></ul>	Core layer
Hotel server room	Switch	G5328X		<ul style="list-style-type: none"><li>•24*Gigabit RJ45 ports, 4*10 Gigabit SFP ports</li><li>•Switch capacity 598Gbps</li><li>•DHCP server, Layer 3 dynamic and static routing, Cloud/App management</li></ul>	Core layer
Low voltage silo on floors	Switch	G3326P-24-410W		<ul style="list-style-type: none"><li>•24*Gigabit RJ45 ports + 2 Gigabit SFP ports</li><li>•PoE budget of whole device: 410W</li><li>•Cloud/App management</li></ul>	Access layer
Hotel rooms	In-wall AP	Pro-6-IW		<ul style="list-style-type: none"><li>•574Mbps+2402Mbps</li><li>•2*Gigabit RJ45 ports</li><li>•20dBm+20dBm</li></ul>	Access layer
Corridor/Other public area	Ceiling AP	Pro-6-LR		<ul style="list-style-type: none"><li>•574Mbps+2402Mbps</li><li>•2*Gigabit RJ45 ports</li><li>•29dBm+29dBm</li></ul>	Access layer



**IP-COM / THANKS**

WORLD WIDE WIRELESS