

Высокоскоростные бесшовные Wi-Fi сети и новейшие беспроводные технологии

Петр Мельников

Agenda

- Introduction
- Корпоративное Wi-Fi решение
- Выполнение проекты
- Продукты
- Q & A

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- **Introduction**
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Группа компании



Acelink
ODM



Edimax
SMB/SOHO
Networking



SMAX
IP Surveillance



COMTREND
Telecom

Наши офисы в мире



15 branches to offer services and logistics

75 Countries carry the Edimax footprint

300 distributors channels worldwide

Профиль компании

Founded	1986
IPO	2001
Headquarters	Taipei, Taiwan
Chairman	Mr. Gene Renn
Capital	US\$64 Million
Employees	1,500 (Engineers: 250+)
R&D Center	Taipei, Hsinchu (Taiwan), Shanghai (China)
ISO Certificate	ISO 9001 (Ver. 2008) ISO 14001 (Ver. 2004)



Развитие

Основана

1986 - 1998

- Founded in 1986
- Factory established in Taiwan & China
- Edimax USA established



Консолидация

1999 – 2007

- Listed on Taiwan stock exchange
- Europe Sales & Logistic Center established
- Edimax UK established
- R&D Center expanded



Развитие

2008 – 2015

- 30% global USB Adapter market share
- No.1 in customer satisfaction and performance by PC Pro Magazine 2010
- 2 million Wi-Fi devices sold 2013
- Taiwan Excellence Award winner for 15 consecutive years
- Top 35 Best Taiwanese Global Brands ranked by Interbrand



product
design award

2014



reddot award 2015
winner



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Решение корпоративного Wi-Fi

- ✓ Новый Wi-Fi стандарт 802.11AC & Dual Band & High Speed
- ✓ Бесшовный роуминг, поддержка 802.11R, 802.11K
- ✓ CMC авторизация
- ✓ High Density support
- ✓ High Power and sensitivity
- ✓ Технология Band Steering
- ✓ Captive Portal
- ✓ Программная обеспечение

$$\text{ROI} = \frac{\text{Функциональность} + \text{Надежность}}{\text{Цена}}$$

Enterprise
Solution

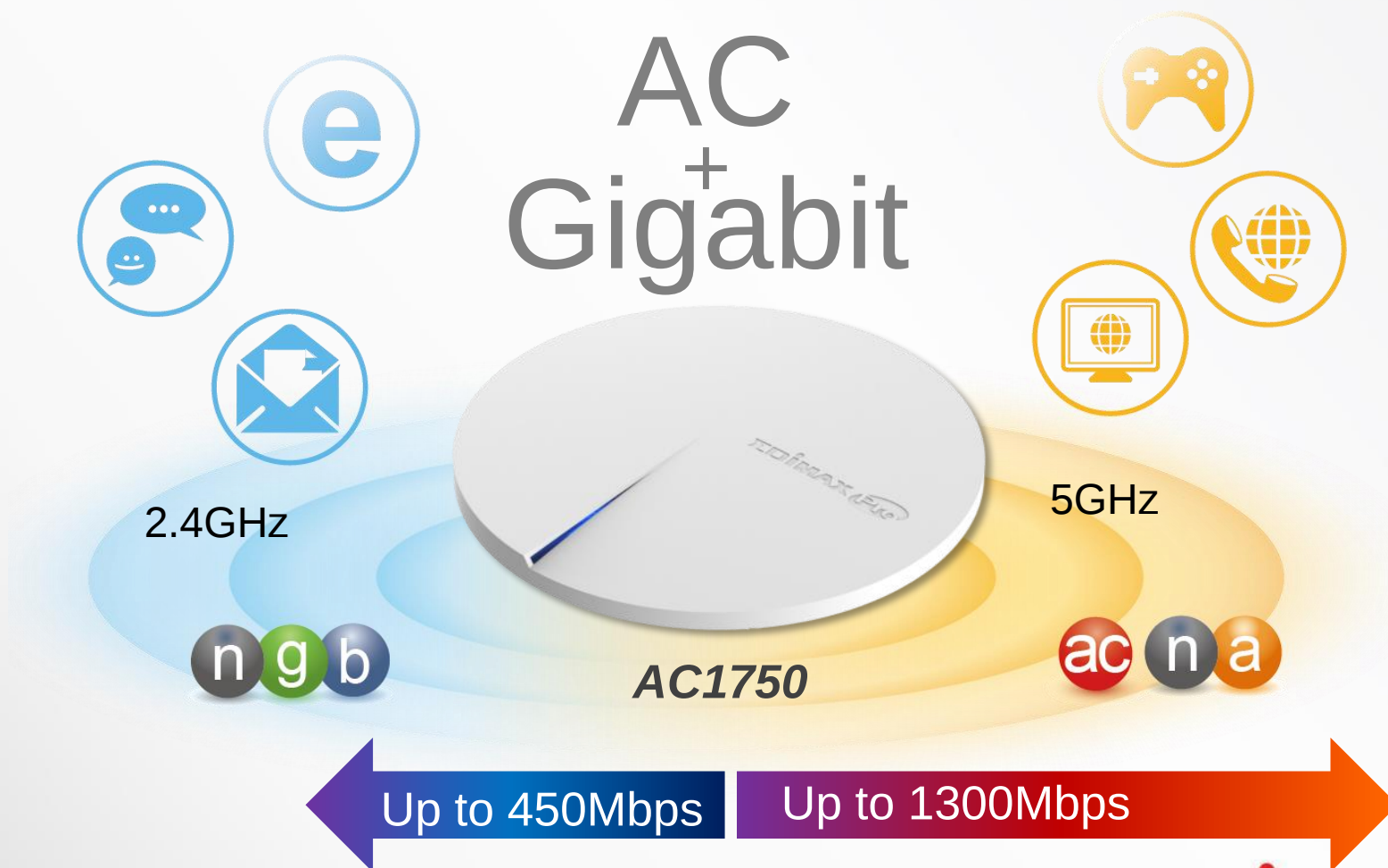
Education
Solution

WISP
Solution

Hospitality
Solution

Dual-Band & High Speed

- Dual-Band Concurrent Wireless-AC configured.
- Up to 1750Mbps in both the 2.4GHz and 5GHz frequency bands

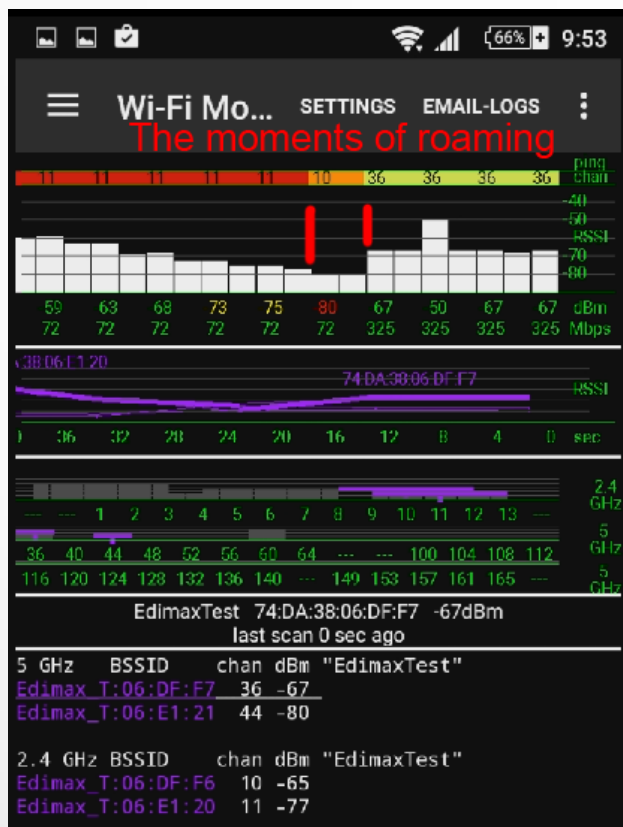


Бесшовный роуминг, 802.11r/k



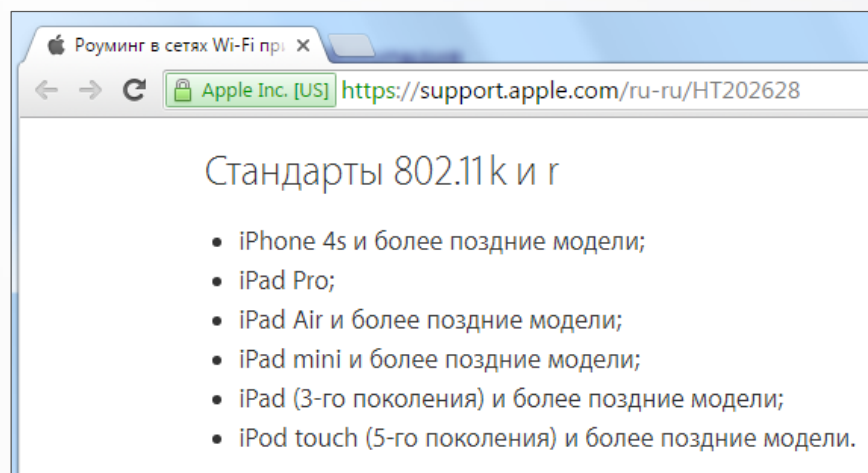
Решение корпоративного Wi-Fi

Преимущества стандарта 802.11R в бесшовном роуминге



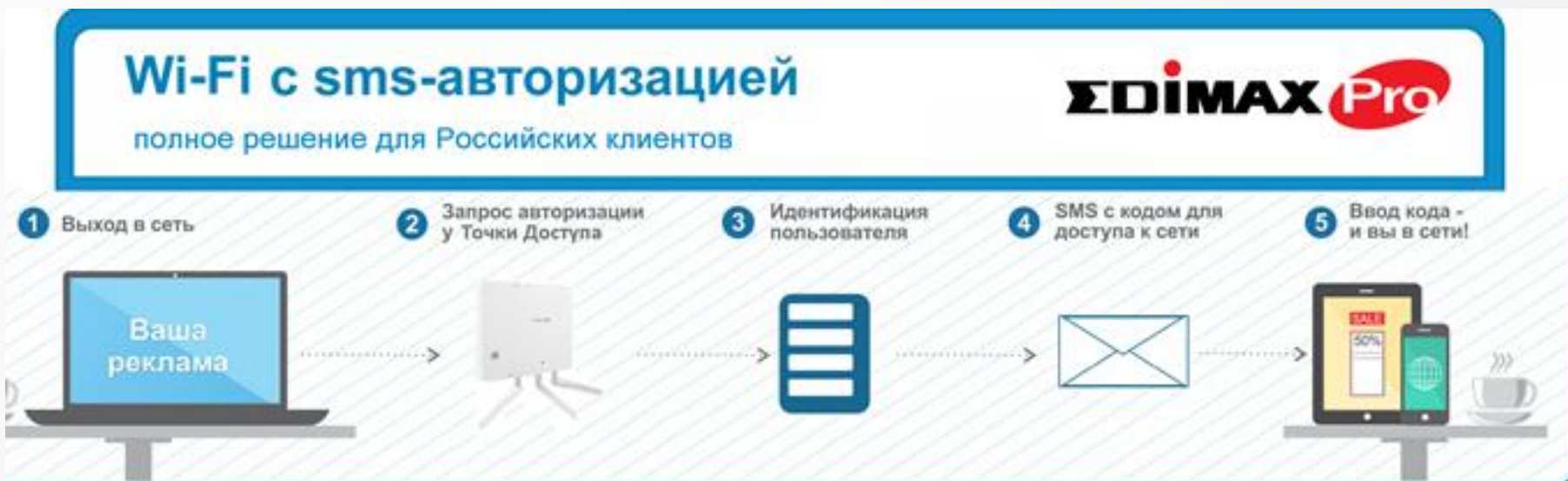
С шифрованием WPA2-Enterprise (встроенный Radius, планшет не поддерживает 802.11R)

Время переключения < 100 мс, проходит незаметно для клиентского оборудования. Разработана в 2008 году. Реализована в полной мере в 2013 году.



Поддерживается в смартфонах бизнес-класса Apple iPhone 4S, 5, 6, Huawei G526, Samsung Galaxy S4, Sony Xperia Z5 Compact, BlackBerry Passport Silver Edition

СМС Авторизация



EDIMAX NETWORKING PEOPLE TOGETHER **Captive Portal Login**

Name

Cell Number

Please enter the text

Submit

Edimax

Welcome! EDIMAX Technology.
SSID: portal_test_ssld_01,
Username: 886987058326,
Password: AKQPBRHUEN, Valid
Period: 1 days, Expire Time:
2016/03/16 15:11:14
15:13

EDIMAX NETWORKING PEOPLE TOGETHER **Welcome**

You've successfully authenticated.
Your guest access is valid until
2016/03/16-15:11:14

Continue

High Density

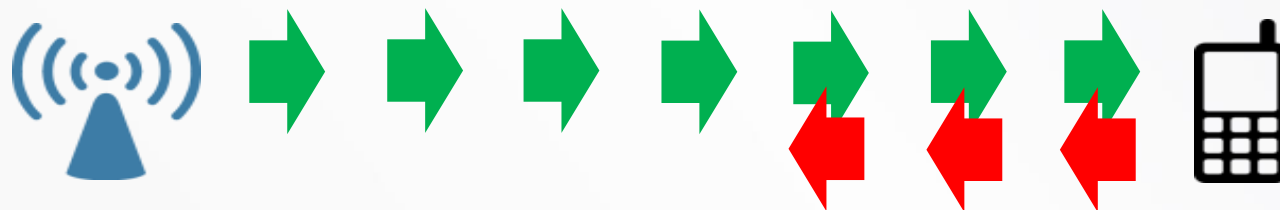
High Density support together with Технологией Band Steering



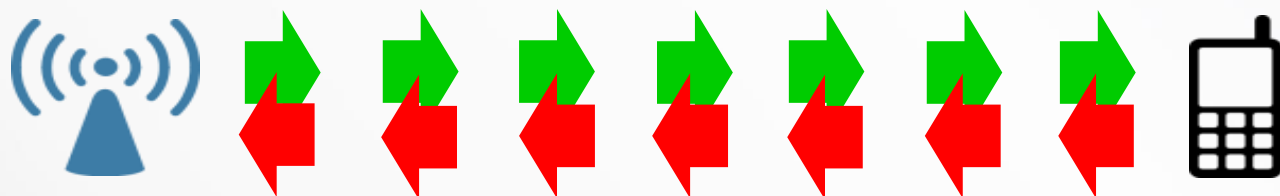
- Поддержка High Density почти не возможна без технологии Band Steering.
- Корпоративные ТД use **band steering** to send 802.11n clients to the 5 GHz 802.11ac band, leaving the 2.4 GHz band for legacy clients.

High power - High sensitivity

Скрытое меню инженера где можно настроить мощность сигнала, диапазоны, для потребности заказчика



High Power



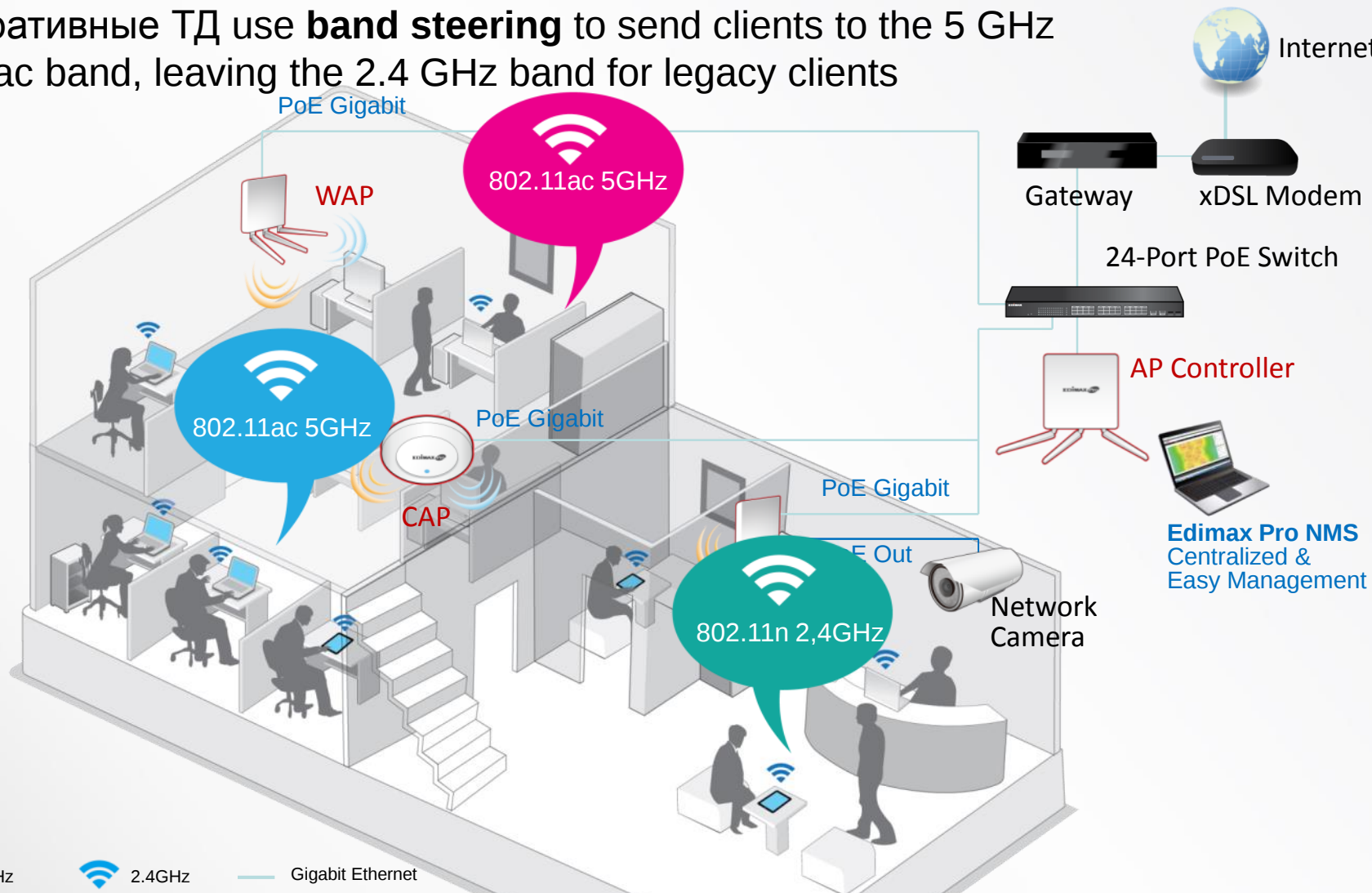
High Sensitivity



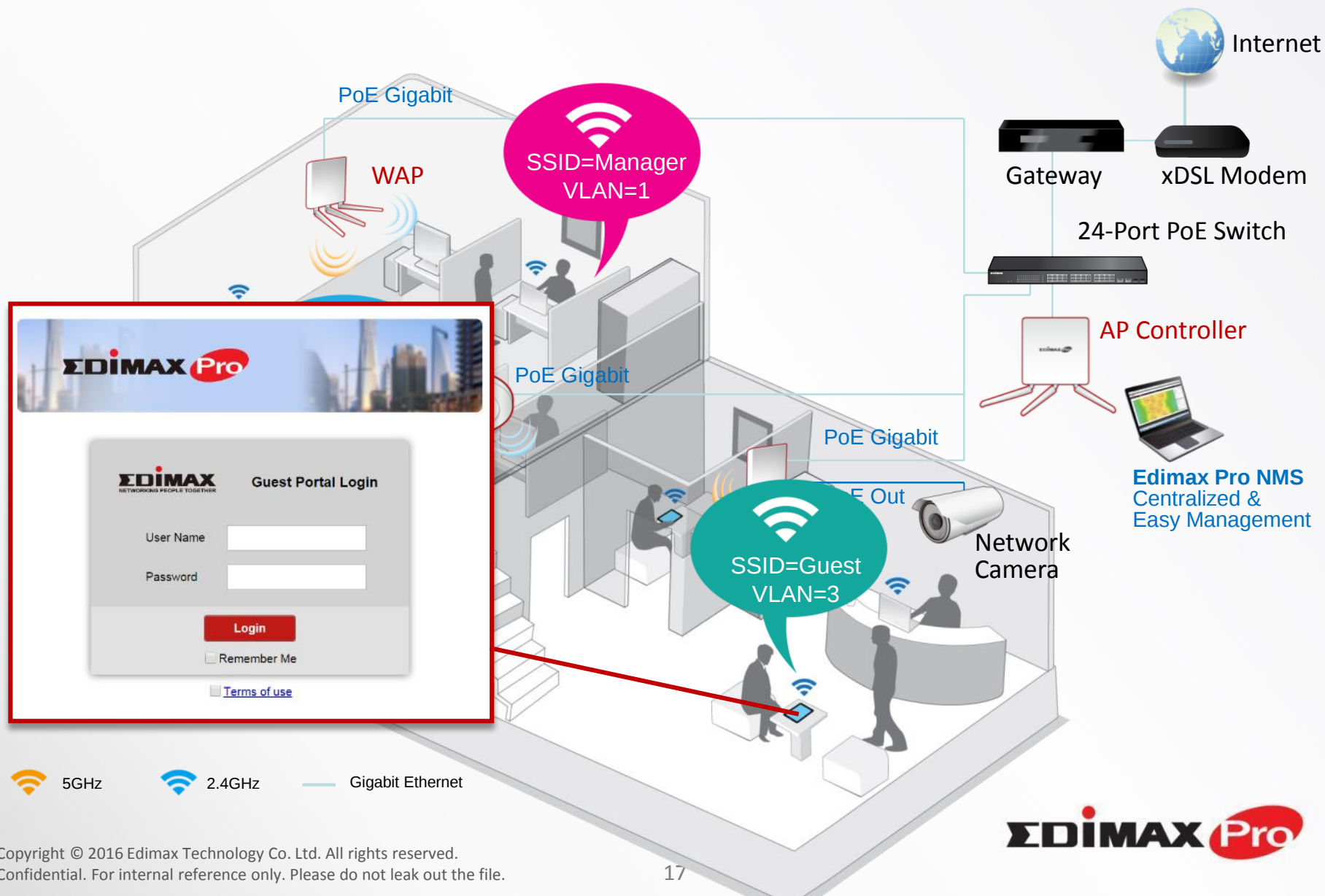
Receiver Sensitivity	802.11b	802.11a
	≤-93dBm@1Mbps	≤-90dBm@6Mbps
	≤-90dBm@11Mbps	≤
	72dBm@54Mbps	
	802.11g	802.11n(5G)
	≤-90dBm@6Mbps	≤-90dBm@MC S0
	≤-74dBm@54Mbps	≤-66dBm@MC S7

Технология Band Steering

Корпоративные ТД use **band steering** to send clients to the 5 GHz 802.11ac band, leaving the 2.4 GHz band for legacy clients



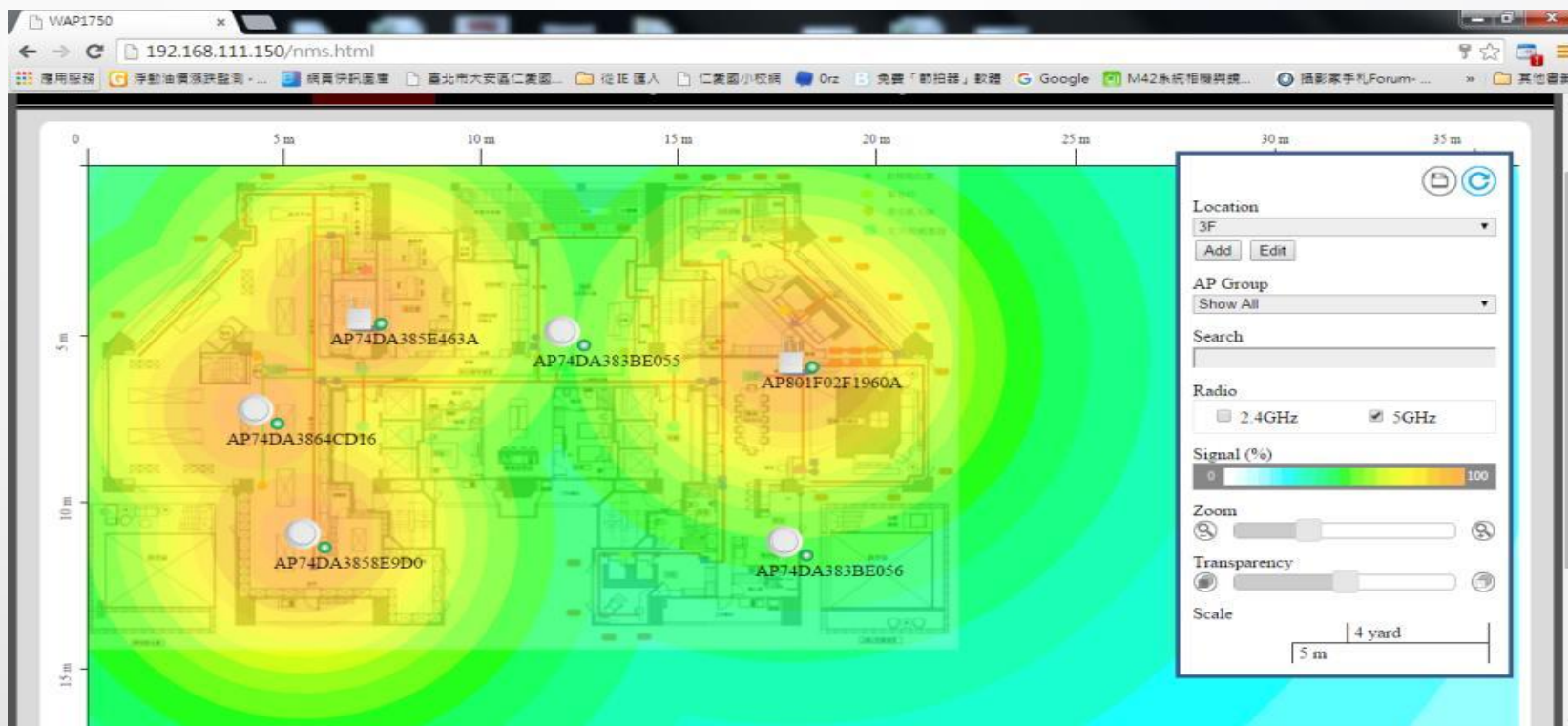
Captive Portal



Zone Plan

The Edimax Pro NMS/APC Controller is an enterprise WLAN management system for administrators to manage all Edimax Pro wireless devices in your environment.

Through Edimax Pro, administrators can easily load maps into the system and see overall coverage of each wireless device clearly.





Multiple SSID

- ✓ **16 SSIDs** supported in **Single Band**
Support 16 SSIDs in 2.4GHz

16 SSIDs

- ✓ **32 SSIDs** supported in **Dual Band**
Support 16 SSIDs in 2.4GHz and
16 SSIDs in 5GHz

32 SSIDs



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Ориентируемся на сегменты

Гостиницы, Офисные здание, Образование, Провайдеры



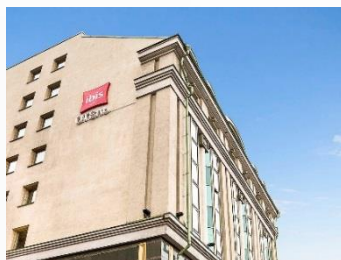
Клиенты доверяет **EDIMAX Pro**



Бизнес центры

- ◆ Local Technical support
- ◆ Direct support from R&D department
- ◆ Product modification according to Project requirements
- ◆ Поддержка при проектированию
- ◆ Installation support
- ◆ Flexible pricing
- ◆ Outstanding ID design
- ◆ Easy-to-use software
- ◆ Global brand with 30 years history

Проект - Ibis Санкт-Петербург

KESCO**Отель****Ibis Санкт-Петербург**

Отель категории 3 звезды европейского уровня предлагает к услугам 221 номер, ресторан «Sud&Cie» и бар, конференц-залы и подземный гараж. Для гостей, предпочитающих наиболее удобно расположенные отели Санкт-Петербурга, нахождение гостиницы в центре обеспечит приятное пребывание. Поблизости – главная улица города и Московский вокзал (500 м).

Профиль**Требования**

1. Полное Wi-Fi покрытие, быстрый Wi-Fi
2. Надежный быстрый роуминг для мобильных устройств
3. Простая установка и приятный внешний вид
4. Централизованное управление и конфигурирование

**Решение**

Гигабитный PoE коммутатор на 24 порта, 4 шт

Точка доступа Edimax CAP1200, 86 шт

Контроллер управления Edimax APC500, 3 шт

Розничная цена оборудование меньше 1М рублей

Проект - Ibis Санкт-Петербург

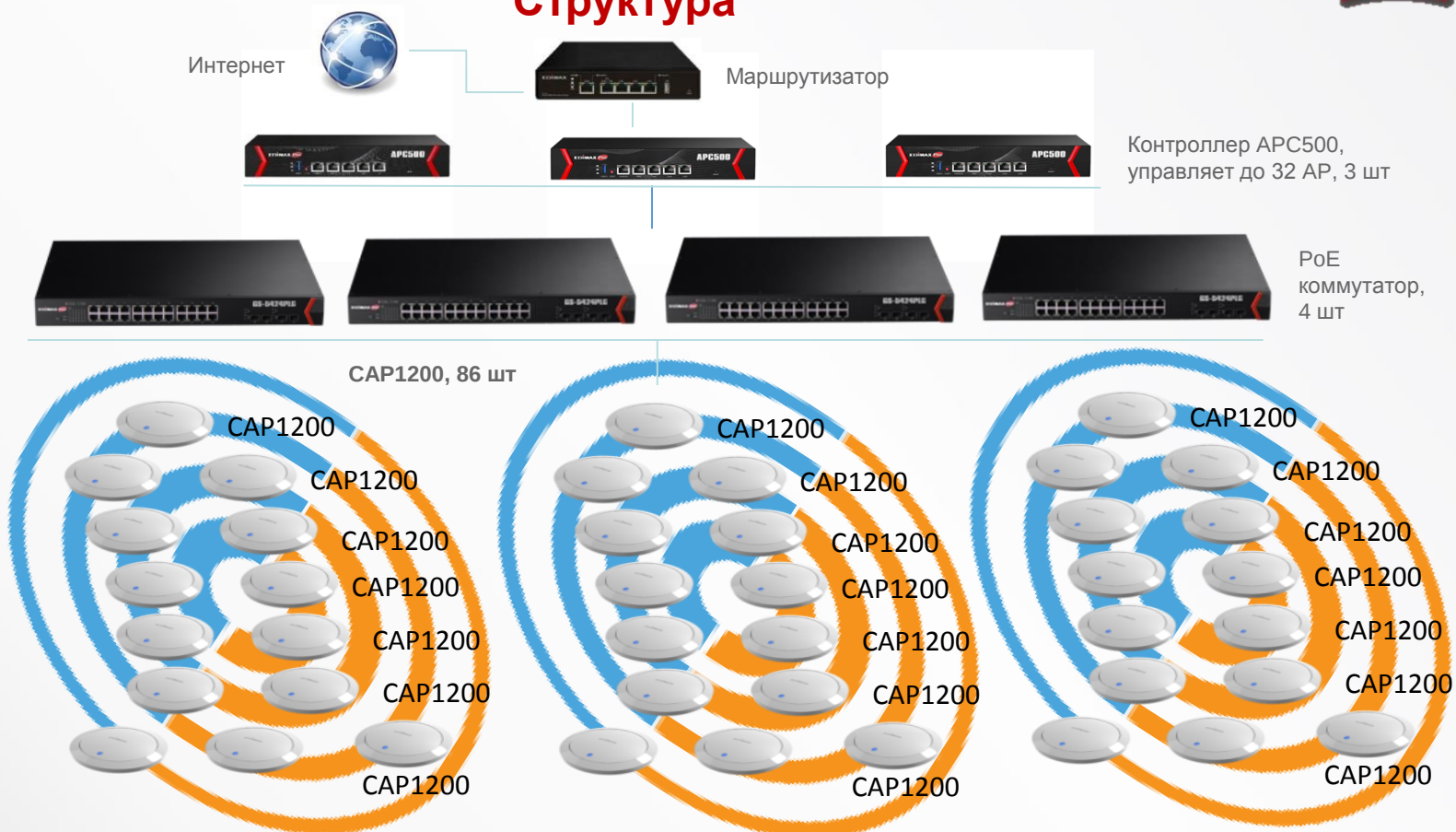
KESCO**Отель****Ibis Санкт-Петербург**

CAP1200, 86 шт

EDIMAX Pro**EDIMAX Pro**

Проект - Ibis Санкт-Петербург

KESCO

Отель
Ibis Санкт-Петербург
Структура


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Comprehensive Product Line

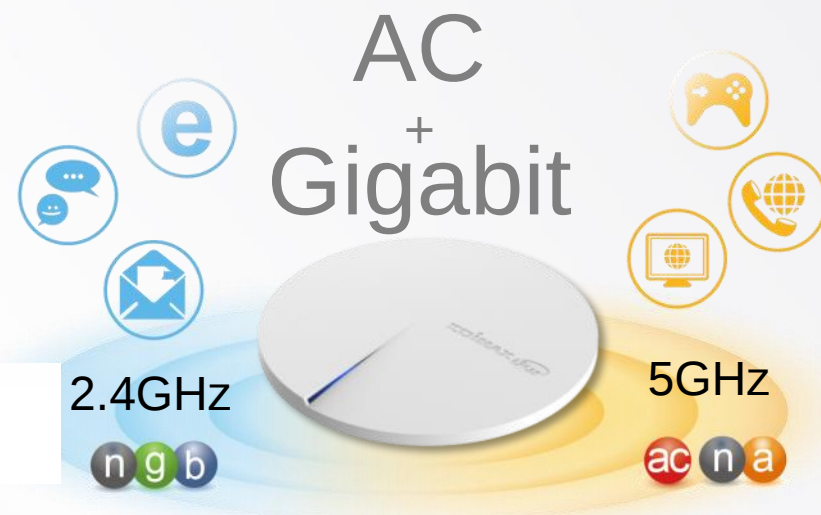
- Контроллеры
- Точки Доступа Wi-Fi
- Коммутаторы
- Аксессуары



Новые модели

Бесшовный роуминг, 802.11r/k

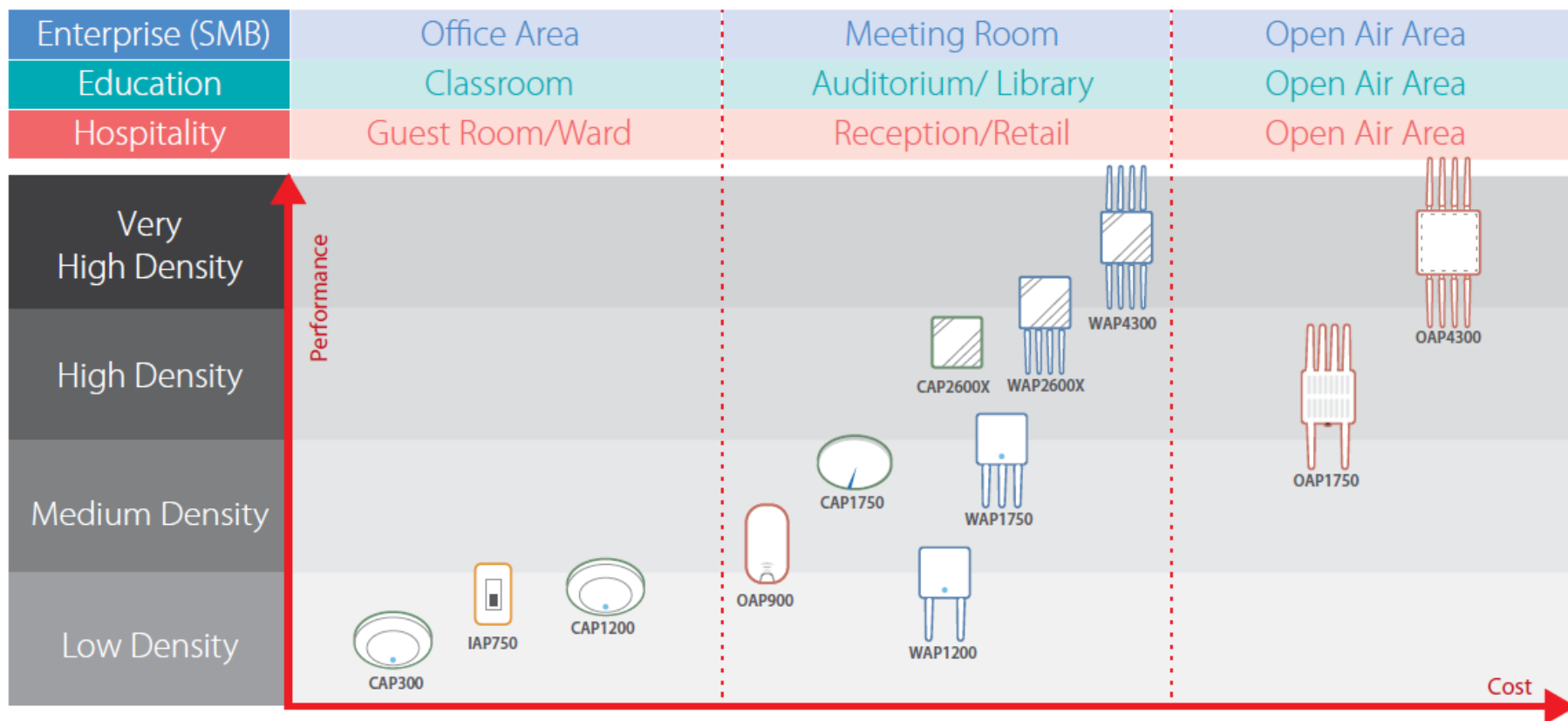
Wi-Fi с sms-авторизацией



Product No.	Wireless Standard	Product Description
CAP300	802.11b/g/n	2.4GHz Wireless N300 Managed Indoor Access Point(Ceiling Mount)
CAP1200	802.11a/b/g/n/ac	Dual Band Wireless AC1200 Managed Indoor Access Point (Ceiling Mount)
CAP1750	802.11a/b/g/n/ac	Dual Band Wireless AC1750 Managed Indoor Access Point (Ceiling Mount)
WAP1200	802.11a/b/g/n/ac	Dual Band Wireless AC1200 Managed Indoor Access Point (Wall Mount)
WAP1750	802.11a/b/g/n/ac	Dual Band Wireless AC1750 Managed Indoor Access Point (Wall Mount)
OAP900	802.11a/b/g/n/ac	5 GHz Wireless AC900 Managed IP55 Outdoor Access Point
OAP1750	802.11a/b/g/n/ac	Dual Band Wireless AC1750 Managed IP68 Outdoor Access Point

Market Segment

Complete product lines to fulfill your vertical market



CAP & WAP Indoor solution



CAP-series can be used in an **open area** such as office, Shopping mall, hotel, Conference room ...etc

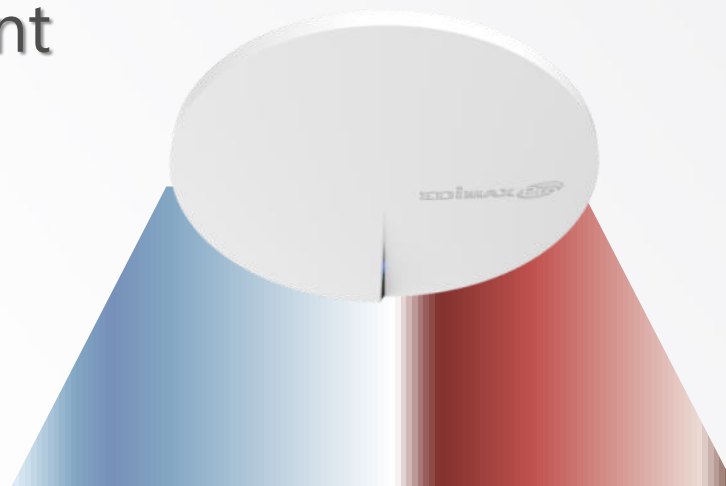
WAP-series can be used in **covering the wireless dead spot** and **long corridor**

or
used as long-distance AP by changing Directional antenna

CAP1750 Indoor Ceiling-Mount



reddot award 2015
winner

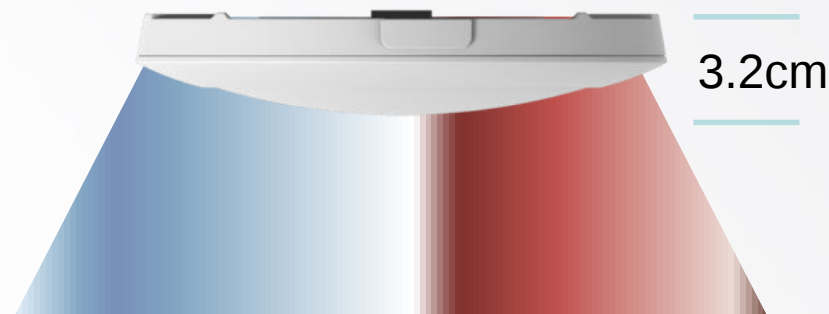


■ 3 x 3 AC1750 Dual-Band Ceiling-Mount PoE Access Point

Features

- IEEE 802.11ac concurrent dual-band with 1750Mbps wireless speed.
- Ultra slim design with [UL94-5VB](#) flame-retardant plastic housing.
- Supports up to [32 SSIDs](#) (16 x 2.4GHz & 16 x 5GHz)
- Fast Roaming
- Supports IEEE [802.3at PoE](#)
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, can manage up to [16](#) Edimax Pro APs

CAP1200 Indoor Ceiling-Mount



■ 2 x 2 AC1200 Dual-Band Ceiling-Mount PoE Access Point

Features

- IEEE 802.11ac concurrent dual-band with 1200Mbps wireless speed.
- Ultra slim design with [UL94-5VB](#) flame-retardant plastic housing.
- Supports up to [32 SSIDs](#) (16 x 2.4GHz & 16 x 5GHz)
- Fast Roaming
- Supports IEEE [802.3af PoE](#)
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, can manage up to [8](#) Edimax Pro APs

CAP300 Indoor Ceiling-Mount



■ 2 x 2 N300 Ceiling-Mount PoE Access Point

Features

- IEEE 802.11n with 300Mbps wireless speed.
- Ultra slim design with **UL94-5VB** flame-retardant plastic housing.
- Supports up to **16 SSIDs**
- Fast Roaming
- Supports IEEE **802.3at PoE**
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, can manage up to **8** Edimax Pro APs

WAP1750



■ 3 x 3 AC1750 Dual-Band Wall-Mount PoE Access Point

Features

- IEEE 802.11ac concurrent dual-band with 1750Mbps wireless speed.
- Supports up to 32 SSIDs (16 x 2.4GHz & 16 x 5GHz)
- High density support up to 100 clients
- Fast Roaming
- Supports IEEE 802.3at PoE
- Supports IEEE 802.3af POE out for an additional POE device
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, can manage up to 16 Edimax Pro APs

WAP1200

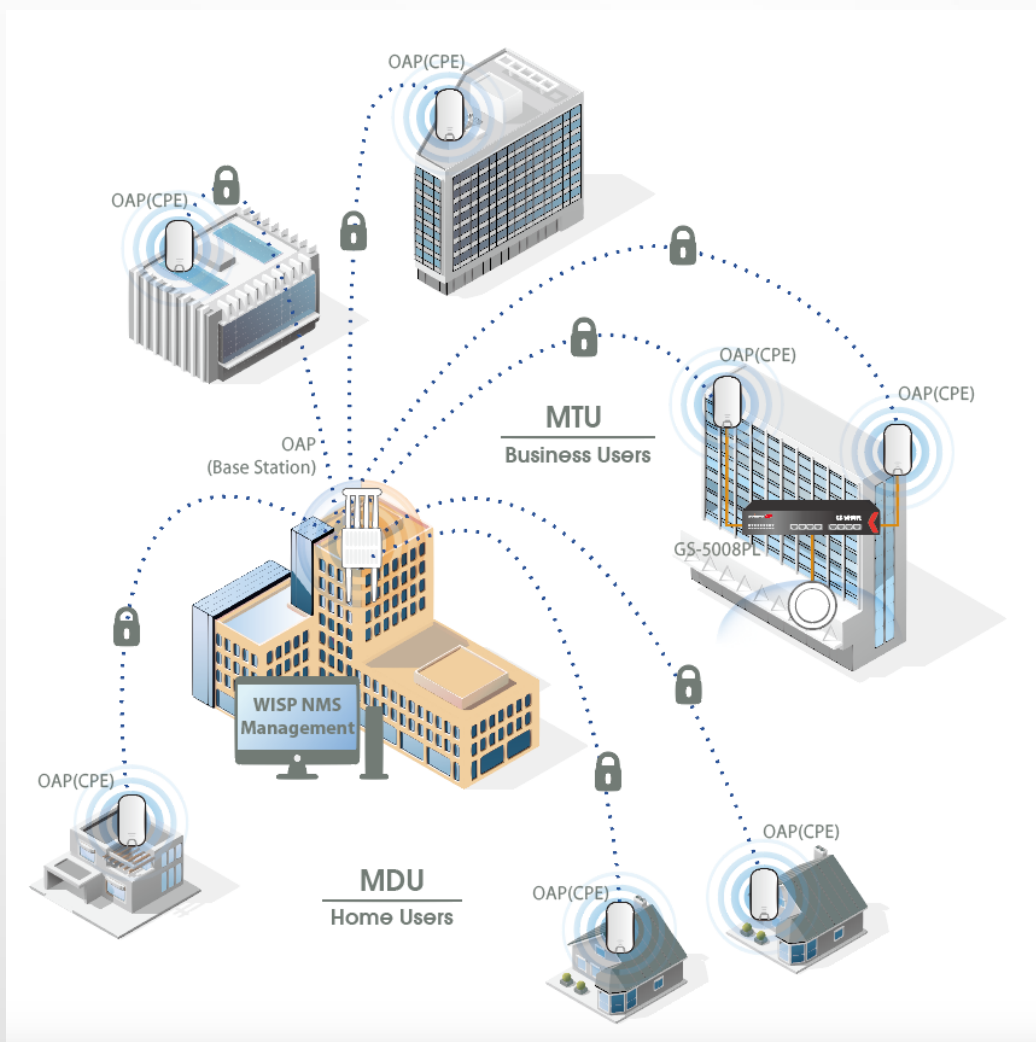


■ 2 x 2 AC1200 Dual-Band Wall-Mount PoE Access Point

Features

- IEEE 802.11ac concurrent dual-band with 1200Mbps wireless speed.
- Supports up to **32 SSIDs** (16 x 2.4GHz & 16 x 5GHz)
- High density support up to **100 clients**
- Fast Roaming
- Supports IEEE **802.3at PoE**
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, can manage up to **16** Edimax Pro APs

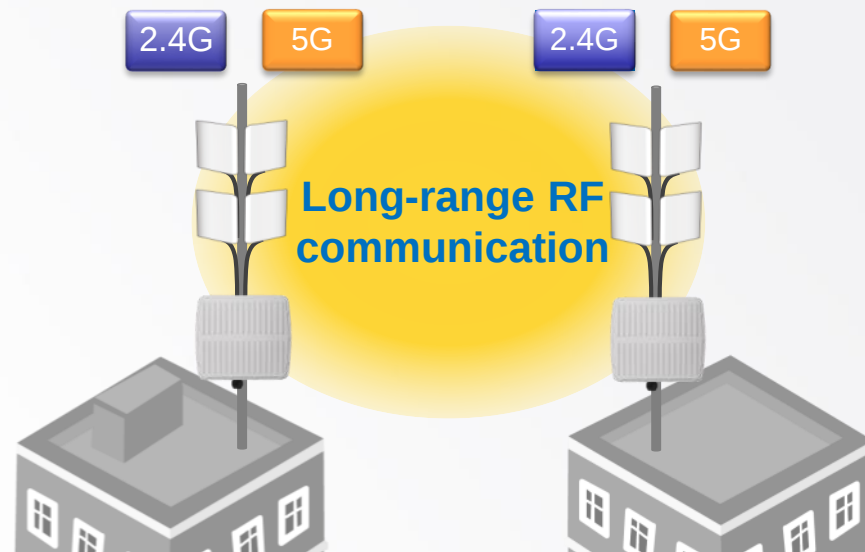
OAP Outdoor solution



OAP1750 can be used as **base station** to form a **wireless backhaul(5G)** and **do wireless service(2.4G)**

OAP900 can be used as **CPE** (Customer Premises Equipment) to build last-mile solution and can combine with OAP1750 for WISP to form a complete Outdoor solution

OAP1750

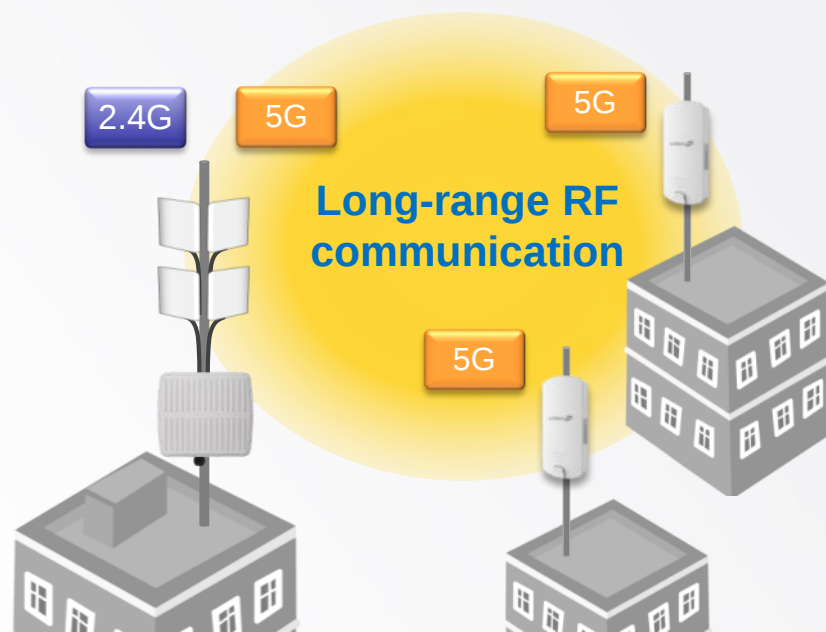


■ 3 x 3 AC1750 Dual-Band Outdoor PoE Access Point

Features

- IEEE 802.11ac concurrent dual-band with 1750Mbps wireless speed.
- Long distance **3-5 KM** wireless transmissions.
- Rust **ASTM B117 IP67** weather shield to survive the most challenging environments.
- Supports up to **32 SSIDs** (16 x 2.4GHz & 16 x 5GHz)
- Fast Roaming
- Supports IEEE **802.3at PoE**
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, supports AP array architecture

OAP900



■ 2 x 2 AC900 5GHz Outdoor PoE Access Point/CPE

Features

- IEEE 802.11ac concurrent dual-band with 900Mbps wireless speed.
- Long distance **3-5 KM** wireless transmissions.
- Build in **15dBi** dual-polarized antenna and **additional SMA connectors** optional
- Supports up to **16** SSIDs
- High speed **last mile** connection
- Supports Passive PoE
- Edimax Pro Network Management Suite (NMS), easy and Intuitive web-based central management suite, supports AP array architecture

APC500 Wireless AP Controller



■ Wireless AP Controller

Features

- Manage up to **128** Edimax Pro APs
- Robust AP management
- Group firmware upgrade & restart.
- Channel/RF power/load optimization.
- Local or built-in RADIUS (AAA) support for user and guest accounts
- Suitable for SMB/SME environments

GS-5424PLG



■ 24-Port Gigabit PoE+ with 4 SFP Web Smart Switch

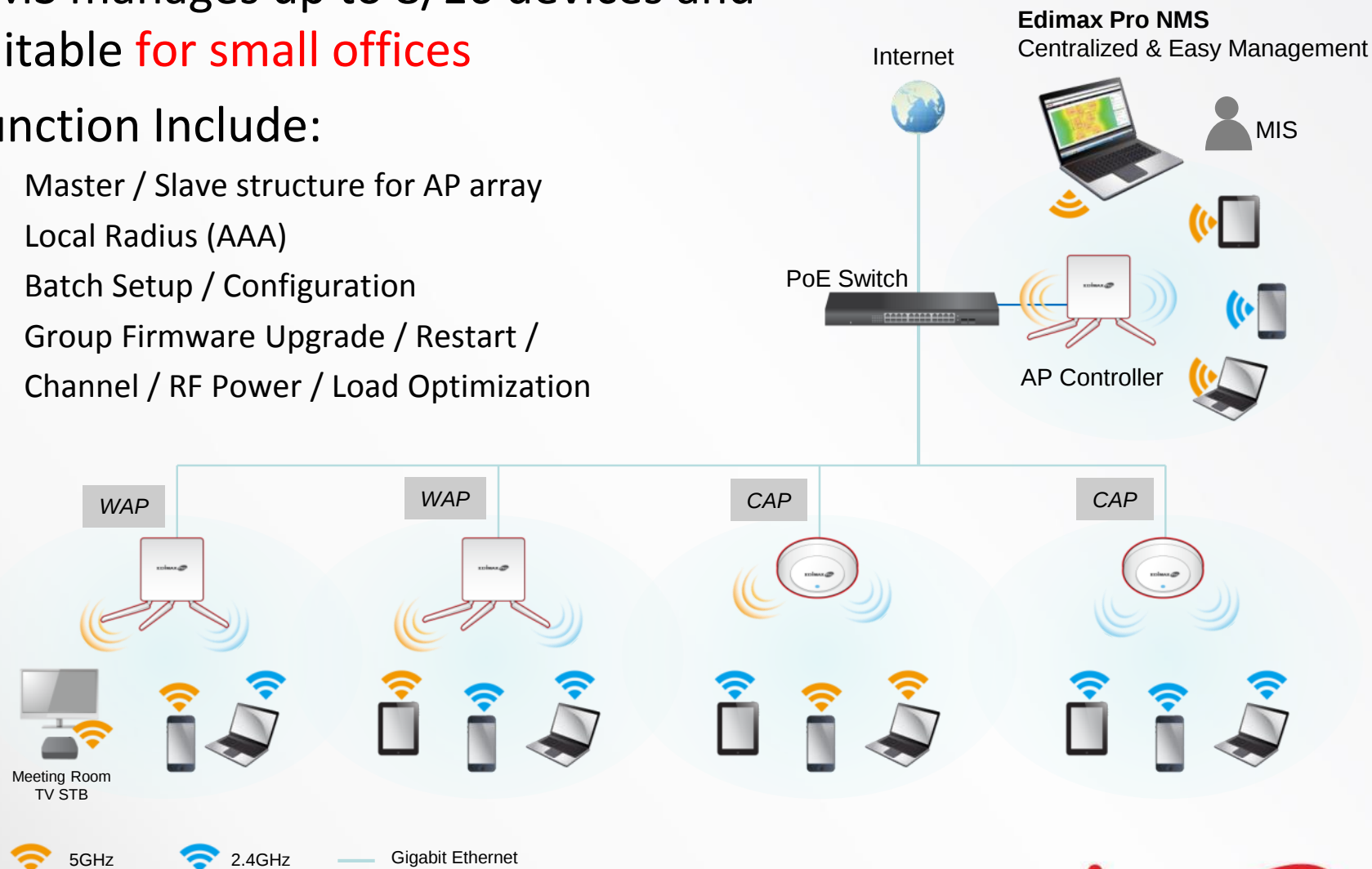
Features

- 24 10/100/1000Mbps Gigabit Ethernet and 4 mini-GBIC/SFP ports
- Up to **30W** per port (total power budget : **400W**) for powering PoE-enabled devices
- Auto-detection of power devices(PD) and power consumption levels
- Auto fault-detection on over/under current & voltage
- **Switch capacity:56Gbps, Forwarding rate:35.7Mbps**
- 8K MAC address table and jumbo frame support up to 9KB
- 19-inch 1U rack-mount



AP Array Technology for Small Offices

- NMS manages up to 8/16 devices and suitable **for small offices**
- Function Include:
 - Master / Slave structure for AP array
 - Local Radius (AAA)
 - Batch Setup / Configuration
 - Group Firmware Upgrade / Restart /
 - Channel / RF Power / Load Optimization



Почему **EDIMAX Pro** ?

Авторизация
через CMC



Мощность и
скорость 802.11ac

Your Trustworthy Network Partner For Home, Business & Telecom

Полное
решение



Бесшовный
Роуминг 802.11r/k



Thank you!