CERIO

Amplify your Wireless Network

Contents

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Introduction to
IW-100 A1

CenOS 5.0 Software Core

eXtreme Wave 2 11n/ac 2.4/5Ghz 2x2
In Wall PoE Access Point (100mW)
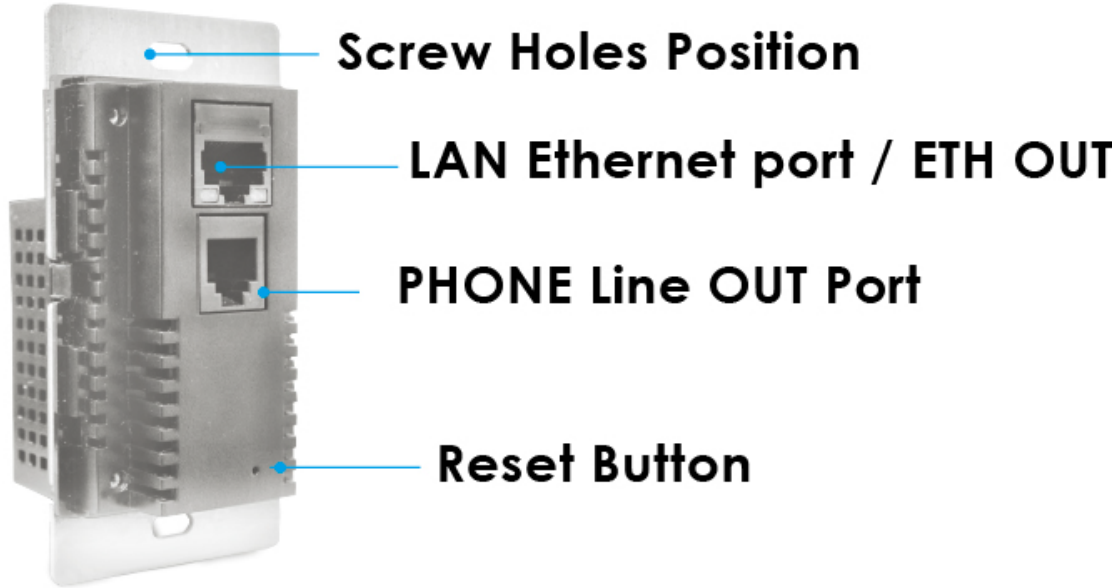
Product Overview
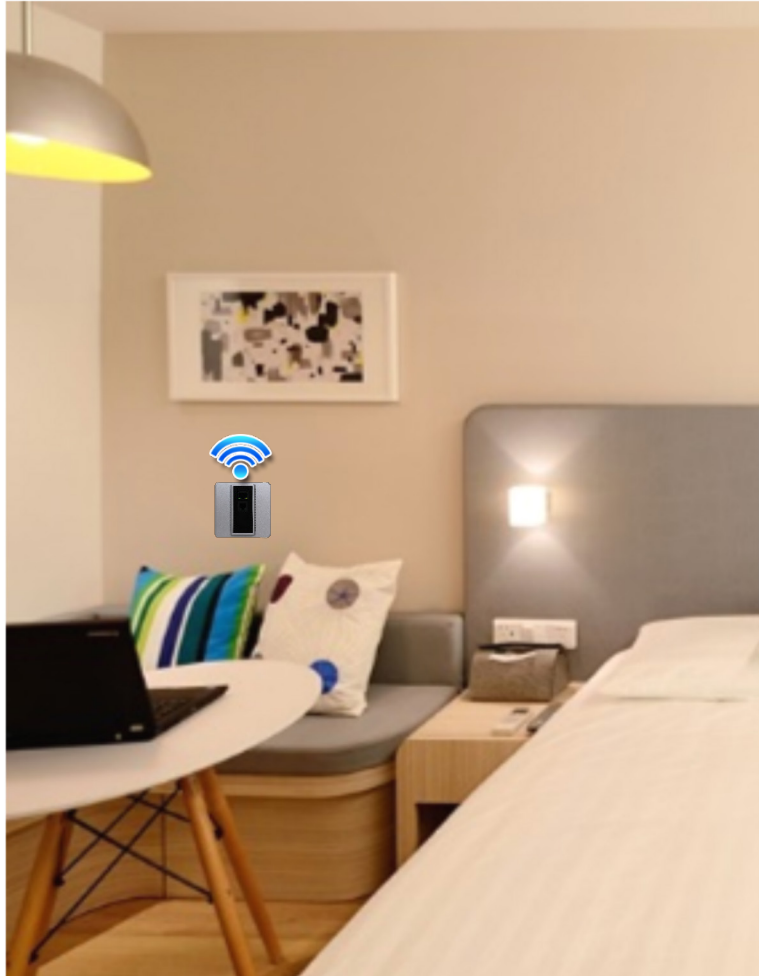
- Dual Band concurrent wireless AC up to **1200Mbps**

- Supports 4 Operation Modes (CenOS 5.0)

- 2x2 Built in antenna for 2.4GHz and 2x2 Built in antenna for 5GHz

- Two 10/100/1000Mbps **Gigabit Ethernet** RJ45 Ports

- Two RJ-11 Phone Line Ports (In / Out)

- Supports IEEE802.3af Power over Ethernet

- Supports **latest MU-MIMO technology** for improvements in the speed, reliability and quality of wireless communications, **provides wireless 4 channel (4 times speed)** simultaneous operation in both 2.4GHz and 5GHz wireless coverage for maximum flexibility.

- Includes two color (Gold & Sliver) Faceplates Set for US or EU mounting standards
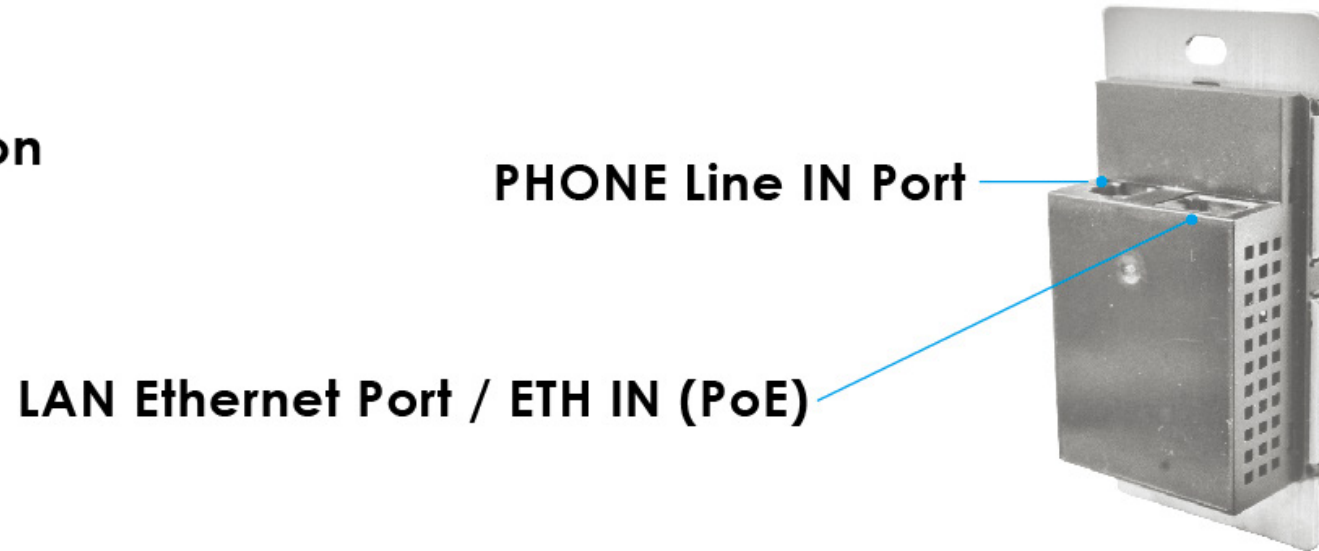
Advanced Features

CERIO

➤ Supports **802.11b/g/n/ac** wireless standards

➤ Operation modes include: Access Point Mode, Control Access Point Mode (Centralized AP Management), Client Bridge + Repeater Mode, and WISP / CPE Repeater

➤ Can broadcast up to **16 ESSIDs**, all of which support VLAN tagging

➤ Control Access Point mode can centrally manage up to **16 AP** devices without the need for an additional AP Controller

➤ Supports Captive Portal Authentication for easy client login

➤ Supports OAuth2.0 for user login through Facebook/Google+

➤ Software smartly includes **LED light control** functions, allowing administrators to turn on/off the blinking LEDs.

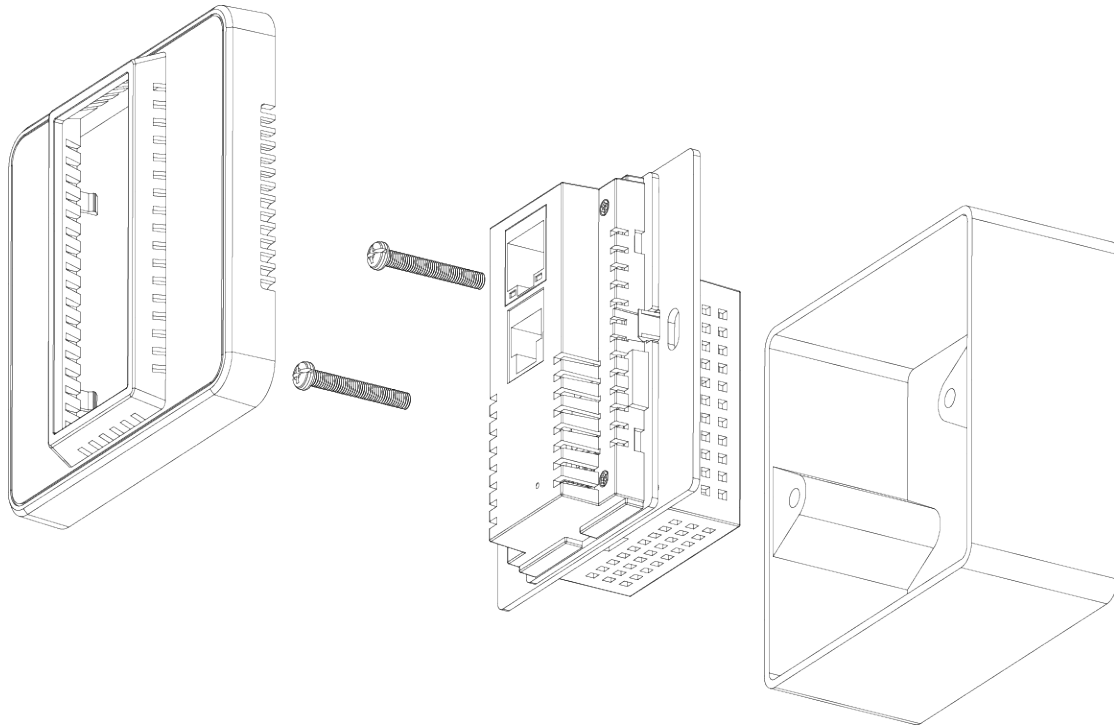➤ Supports Wireless **IGMP snooping** protocol

Hardware Overview

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Front Panel

- Screw Holes Position
- LAN Ethernet port / ETH OUT
- PHONE Line OUT Port
- Reset Button

Rear Panel

- PHONE Line IN Port
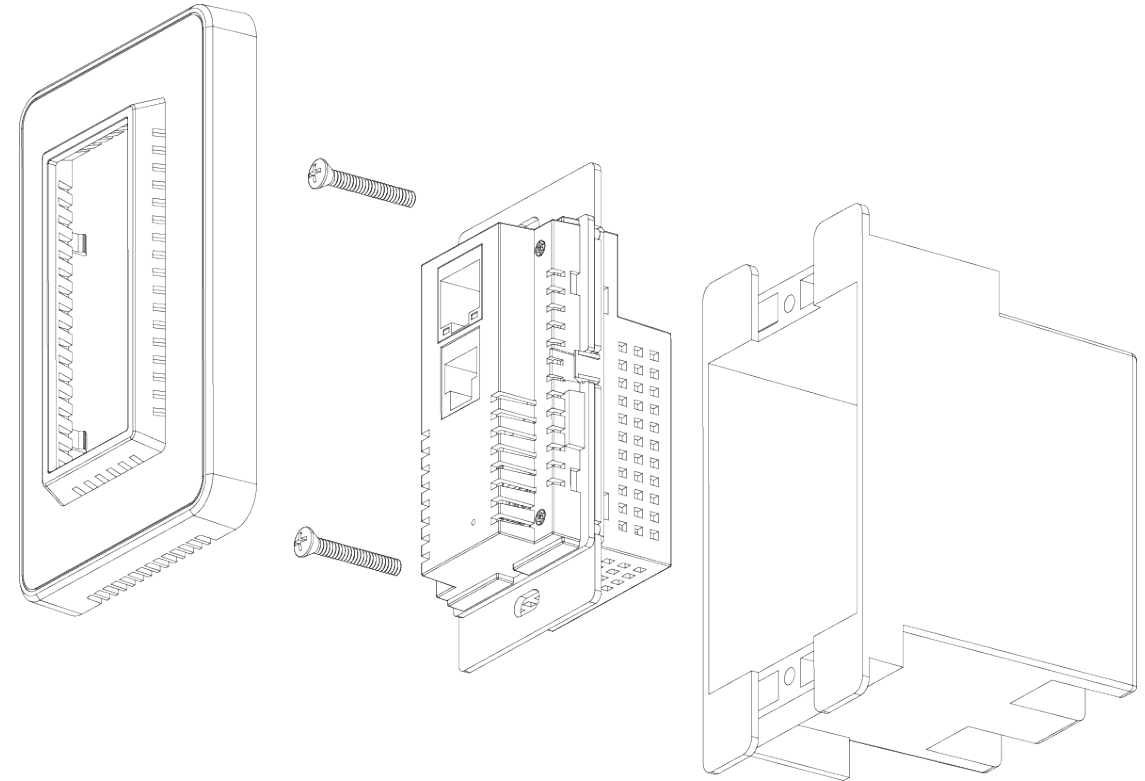- LAN Ethernet Port / ETH IN (PoE)
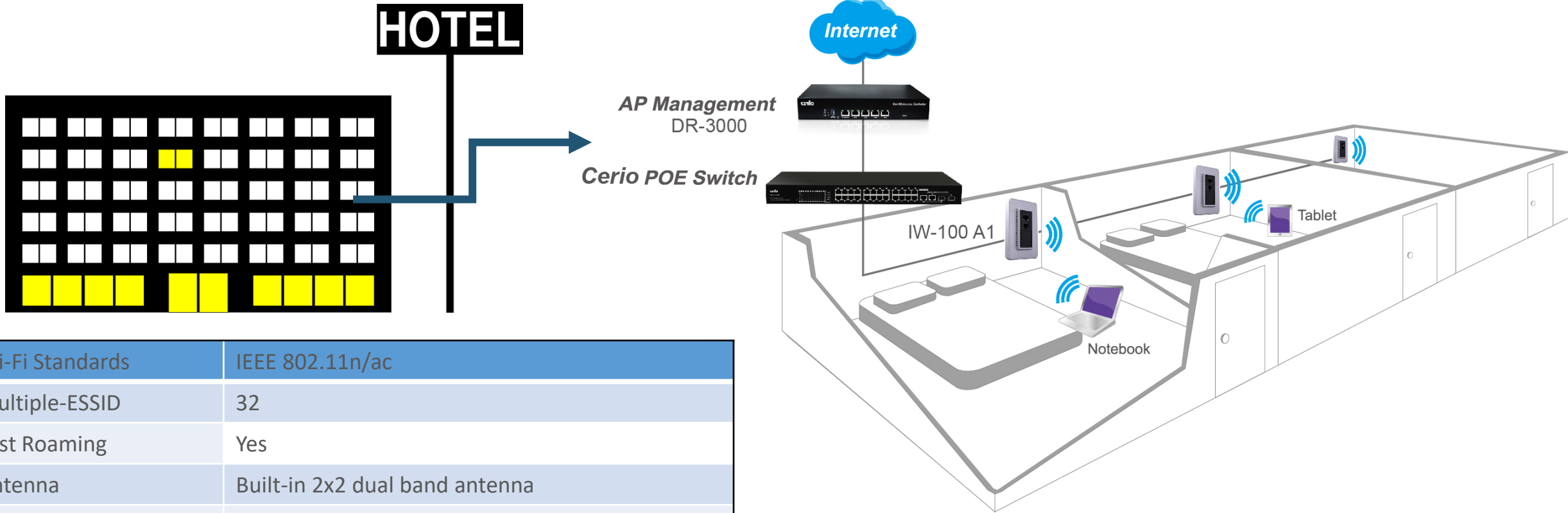
In-wall Design

Main Unit wit EU-Type Faceplate Module
(For Europe / China Specification)

Main Unit wit US-Type Faceplate Module
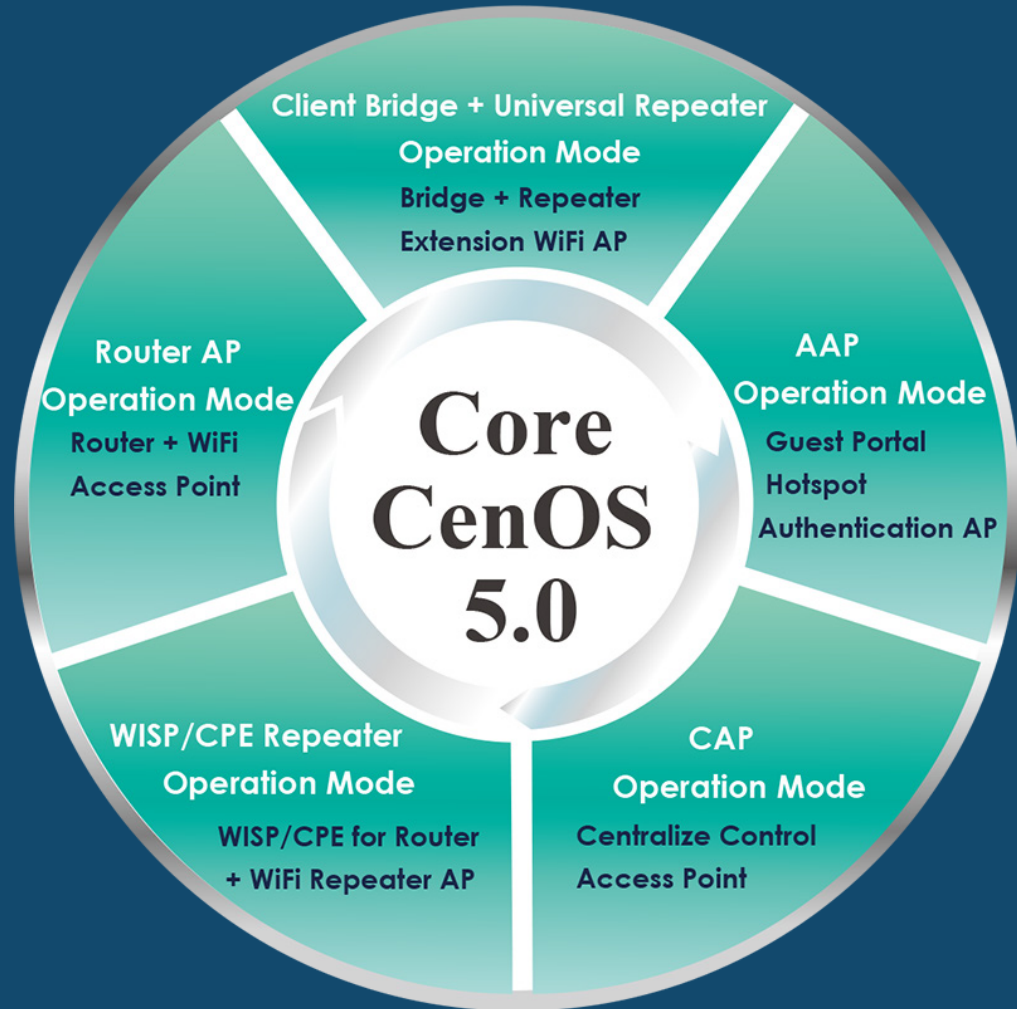(For U.S.A. / Japan Specification)

Hotel Application

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HOTEL

Internet

AP Management
DR-3000

Cerio POE Switch

IW-100 A1

Tablet

Notebook

Wi-Fi Standards	IEEE 802.11n/ac
Multiple-ESSID	32
Fast Roaming	Yes
Antenna	Built-in 2x2 dual band antenna
Management	By DR-3000 or CenOS5.0 CAP Mode
Ethernet Configuration	2 Gigabit LAN ports
Telephone Configuration	2 RJ11 Telephone ports
Power Requirement	802.3af PoE Ethernet Interface Power in
Form Factor	In Wall Installation: US Type or EU Type Faceplate

EU Type Sliver Color	EU Type Gold Color	US Type Sliver Color	US Type Gold Color

Hardware Design

IW-100 A1 includes **2 RJ11 ports** for Phone Line and **2 RJ45 Ports** for POE-IN and Ethernet connection. This hardware design makes this in wall access point perfect for environments such as hotels and luxury homes.

Software Overview

Core CenOS 5.0

Client Bridge + Universal Repeater
Operation Mode
Bridge + Repeater
Extension WiFi AP

AAP
Operation Mode
Guest Portal
Hotspot
Authentication AP

CAP
Operation Mode
Centralize Control
Access Point

WISP/CPE Repeater
Operation Mode
WISP/CPE for Router
+ WiFi Repeater AP

Router AP
Operation Mode
Router + WiFi
Access Point

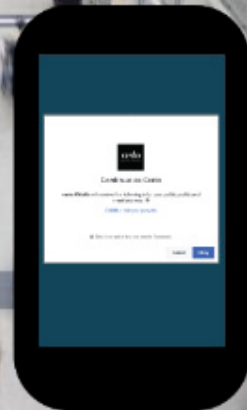Only Cerio's special model supports CAP / Router mode

Captive Portal Authentication

CERIO

Captive Portal Authentication conveniently allows wireless clients to access the network through a customized web login portal.
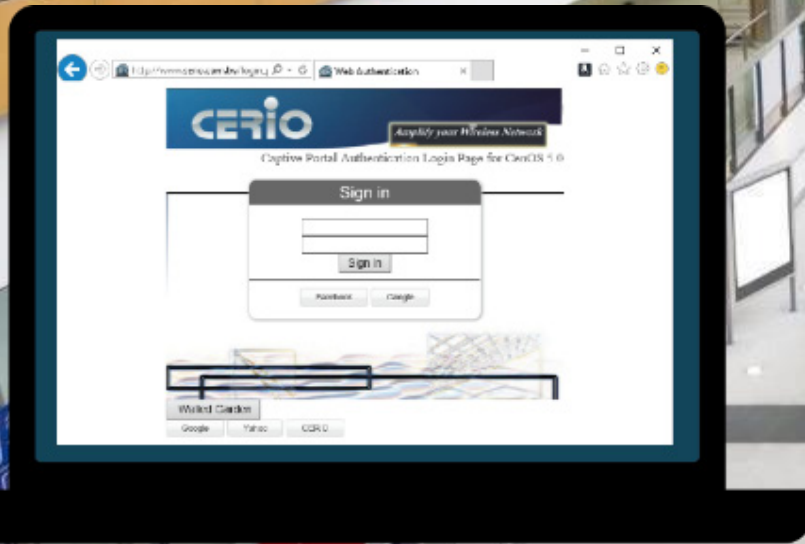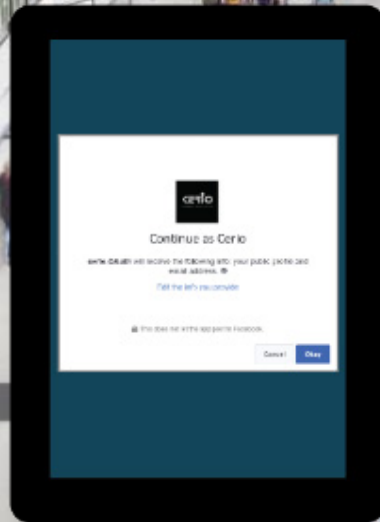
Administrators can deploy a customized Captive Portal with the following login methods

1. Guest Login

2. Local Account Login

3. OAuth2.0 Login

(Facebook/Google/etc.)

Local Account Login

f Facebook Login

Integrated AP Management

Centralized AP Management

AP Management

AP Controller

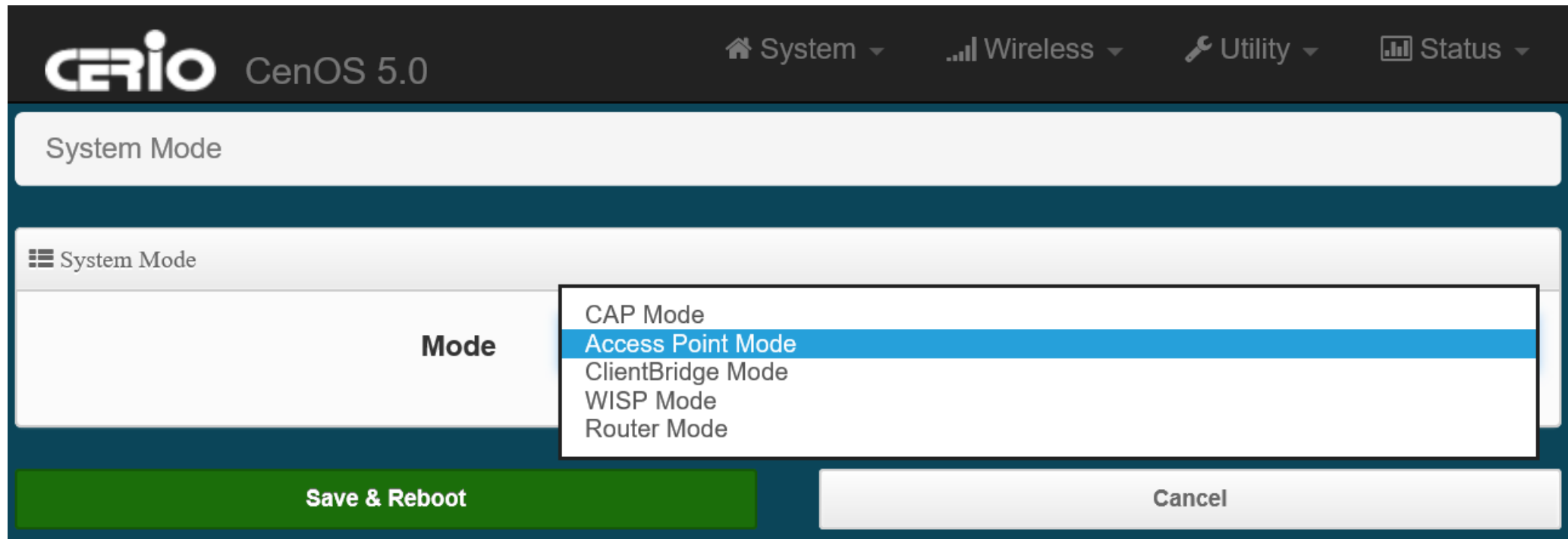g+ Login

f Login

f Login

Y Login

f Login

g+ Login

Fast and Convenient Client Login

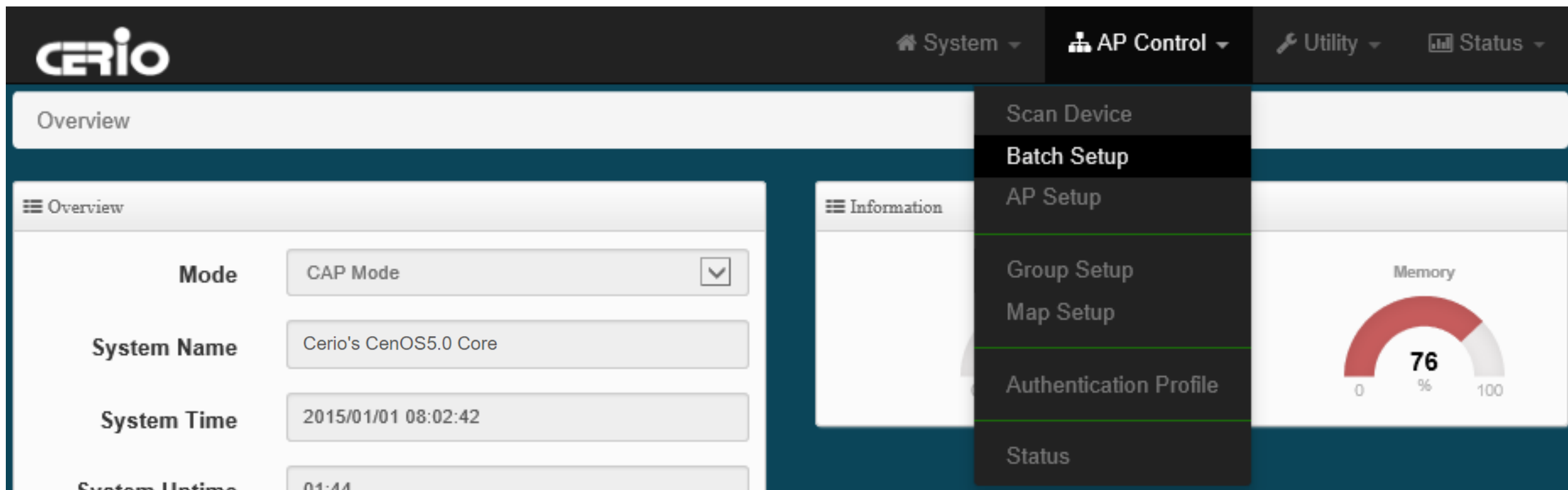# Captive Portal Authentication

Operation Modes

IW-100 A1 supports four different Operation Modes: Access Point Mode, Control Access Point Mode (Centralized AP Management), Client Bridge + Repeater Mode, and WISP / CPE Repeater

*Notice: IW-100 A1 does **NOT support** Router Mode*

Control Access Point

Control Access Point (CAP) Mode's converts the device into a centralized AP management controller. When IW-100 A1 is in CAP Mode, it can centrally manage up to **16 AP devices.**

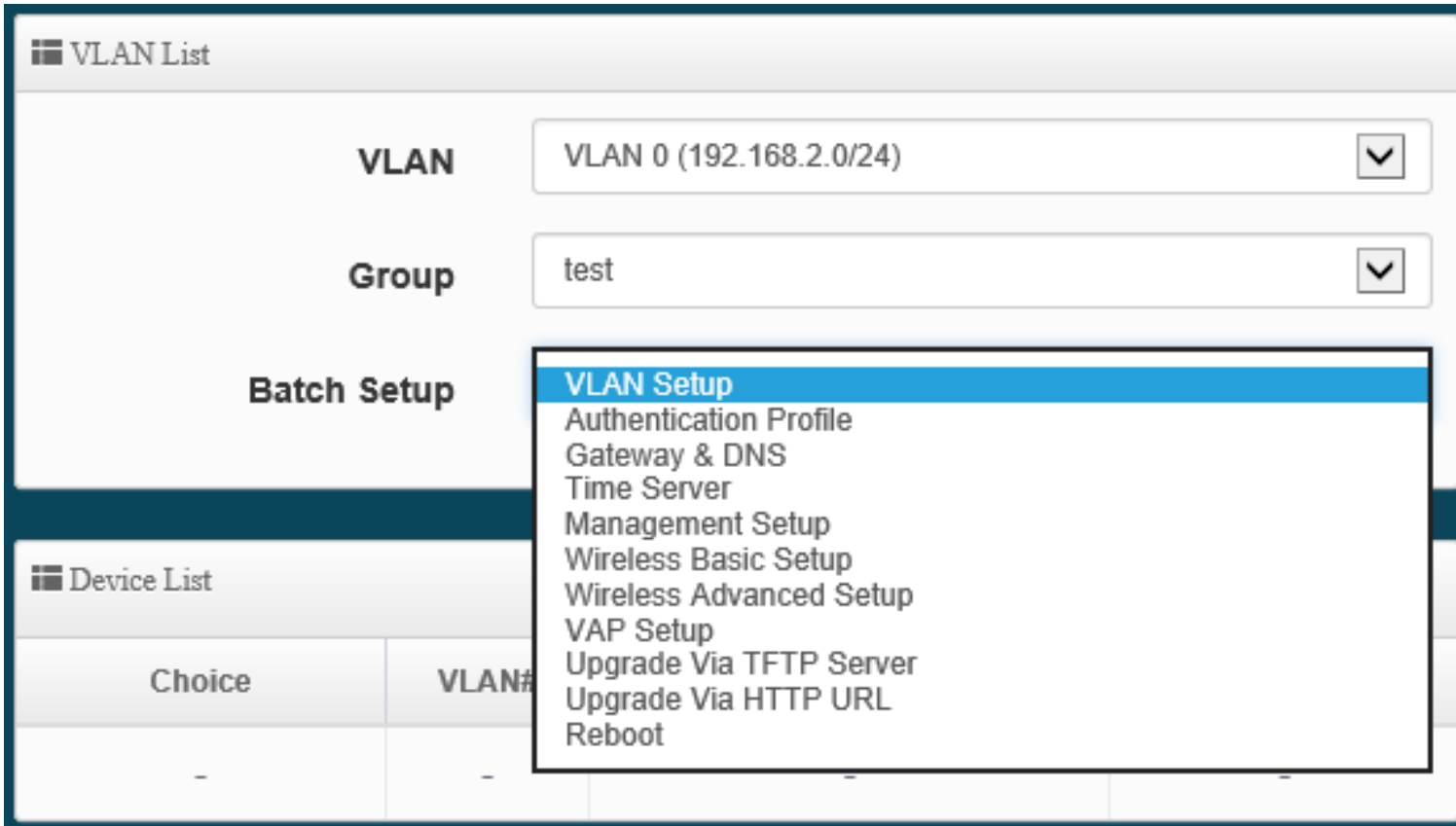# Scan and Import

CAP Mode allows administrators to scan for AP devices within their virtual LAN and import them into the management database. Once imported, administrators can make quick changes such as changing IP addresses for organization and easy management

Batch Setup

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CAP Mode's control function supports centralized configuration of managed APs. This allows administrators to make convenient batch changes to the network of AP devices from one centralized location. This main function of CAP mode can save time and cost by reducing servicing and installation time.

Batch Setup

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Administrators can enable VLAN Mode, Spanning tree, Control Port capabilities, IAPP Roaming, change IP settings and setup VLAN tag for batches of access points. These changes can be implemented differently for each VLAN, allowing for both centralized and organized control.
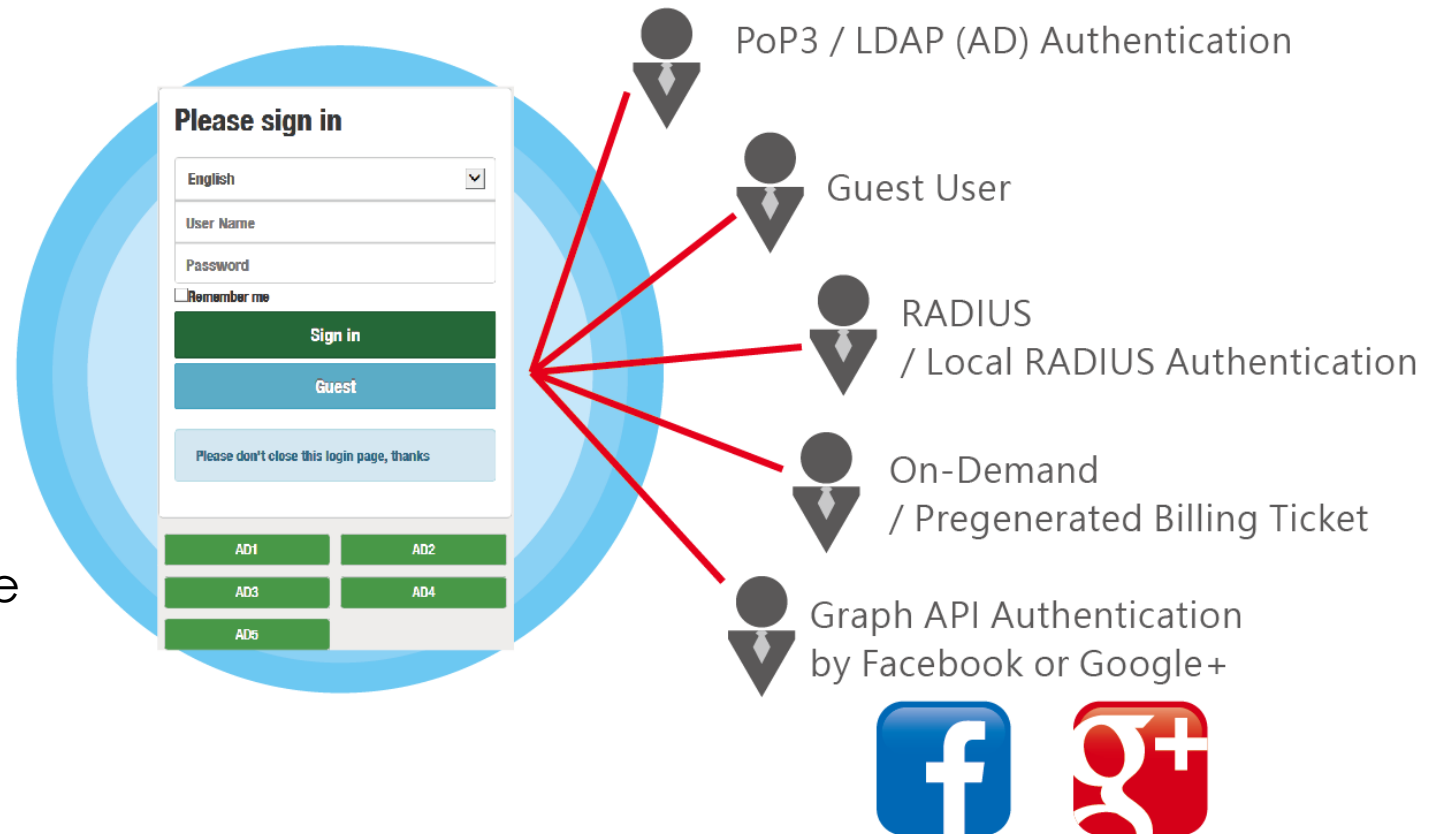
Map Setup

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CAP Mode also supports Map Setup function for organizing your AP network. Administrators can create maps by uploading floor plan URLs and dragging APs to the correct location. Once complete, administrators can monitor AP statuses such as uptime, data rates, and connected clients

Authentication AP

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CenOS 5.0 supports Authentication Access Point Mode for versatile AP deployment. Administrators can choose from many authentication options to best suit their network needs.

This enables convenient access to the wireless network for public clients, as well as improved management and organization for network administrators

PoP3 / LDAP (AD) Authentication

Guest User

RADIUS / Local RADIUS Authentication

On-Demand / Pregenerated Billing Ticket

Graph API Authentication by Facebook or Google+

OAuth2.0 Login

CenOS 5.0 supports multiple methods of authentication for user management, security and convenience.

OAuth2.0 : Allows devices to use third-party credentials such as Facebook and Google+ for user authentication. This provides login convenience for public clients and also allows administrators to collect data through Facebook / Google analytics.

#	Active	Provider	Action
		☰ OAuth 2.0 Provider List	Create New Provider
1	On	Google	Edit
2	On	Facebook	Edit

Authentication

Guest Login : Provides limited WiFi connection to clients to an open network. Limitations can be put in place to manage client limits, connection time, and control bandwidth

Local User: Provides fixed authentication user accounts for controlled client login and data management. Administrators can track Local Account usage, connection time, etc. CenOS 5.0 supports up to 10 Local User accounts
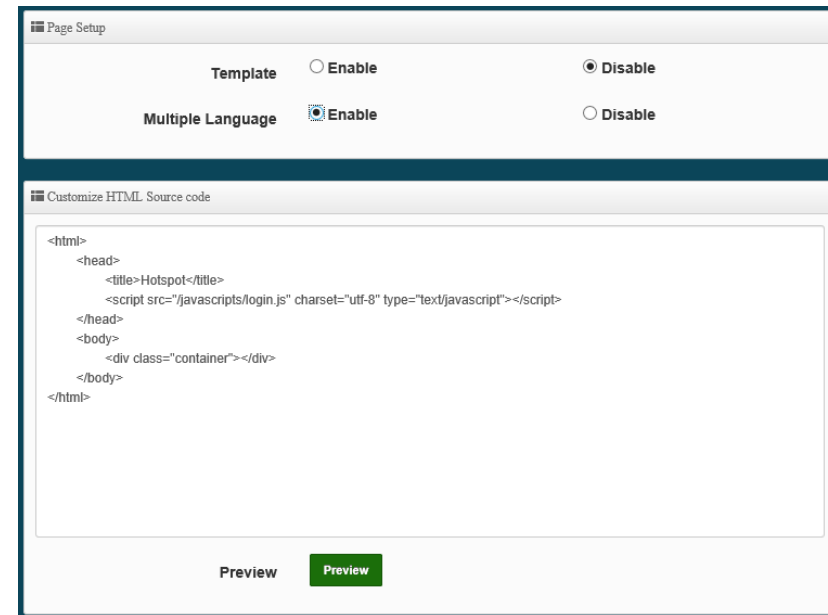
Customized Login Page

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Administrators can create a customized Login Page which can become a platform for:

(1.) Promotions **(2.)** Brand Exposure **(3.)** Advertisements **(4.)** Platform for providing Information

This customized Captive Portal supports login through **1.** Guest Users **2.** Local Accounts

3. Facebook, Google+, etc using OAuth2.0.

Customized Login Page

Customize through HTML Code

Bandwidth Control

Bandwidth Control of connected clients allows administrators to control individual user upload and download speeds, as well as set a maximum limit on the total amount of bandwidth that can be used at a single time.

Walled Garden

Modes Walled Garden function allows administrators to create a browsing environment that controls user access and accessible information. This function is ideal for directing users to specific parts of the Web such as;

1. Paid Content
2. Self-Promotions
3. Free access to specific websites
4. Advertisement web pages

Enabled Walled Garden Websites

Virtual LANs & ESSIDs

IW-100 A1's design supports a total of 8 Virtual LANs (VLAN) and 16 ESSIDs.

Supports 8 VLANs   Each VLAN supports 2 SSIDs

IW-100 A1 supports up to **4096** Tags. This is a crucial feature that ensures successful directing of packet traffic for VLANs that span across multiple switches.

Additional Features

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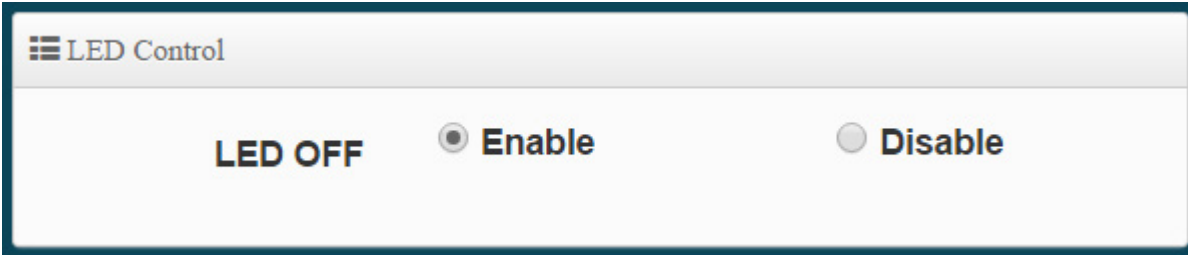
LED Control- Allows the devices LED lights to be disabled to reduce blinking irritation in sensitive environments.
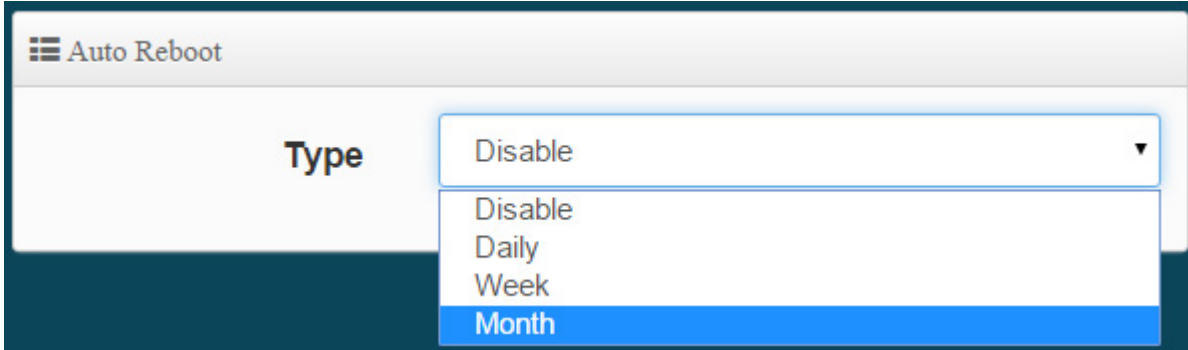
Auto Reboot- Setup device auto reboot schedule to reduce CPU overloading and device crashes.

What we do

Innovation & Design
Our R&D team continues to incorporate the newest wireless protocols and features to make our products perfect for enterprise deployment.

Wireless Solutions
Our Field Application Engineers and Specialists have unparalleled experience providing the perfect solution for any wireless projects (e.g. Hotels, Long Distance PTP Backhaul, Universities)

Software Development & Design
Our software provides a high featured and easily operated User Interface and also supports centralized AP Management for convenient device deployment.

Outstanding Customer Service
CERIO's customer service staff are experts on our products and possess clear and patient communication skills.

www.cerio.com.tw

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www.facebook.com/center.ww

www.linkedin.com/company/cerio-corpartion

www.youtube.com/channel/UCejUL-o3rQavyltXEEMyK1A

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