CERIO
Amplify your Wireless Network

AM-5000

CenOS5.0 AP Access Controller (Max 500APs)

EAN Code : 4712757152913

Introduction

CERIO's AM-5000 CenOS5.0 System Access Controller is designed for applications in which a compact, cost-effective" all-in-one" networking solution is required. CERIO AM-5000 included 4 Ethernet Port, AP controller in a desktop-mount enclosure. This device centralized configuration and management model enables the controllers to be deployed, monitored, and controlled without local IT staff. The AM-5000 is a full-featured Wireless LAN Giga Ethernet security controller that aggregates up to 500 access points (APs), built-in 5000 local accounts /5000 on-demand accounts and delivers centralized control and security for wireless deployments.

CERIO's AM-5000 system applies to public access network such as WiFi-Hotspot, network management guest access, hospitality deployments – which require reliability, efficiency, and security. One single AM-5000 can serve up to 500 unit access point, takes control over authentication, authorization to the Internet as well as to the operating central. Built-in AAA Radius server, AAA RADIUS Server combines WiFi-Hotspot authentication contain single ticket / Pregenerated ticket / RADIUS account and remote LDAP(AD) Server authentication, simply match CERIO's CenOS 5.0 AP and enable RADIUS authentication.

Centralized Access Points Management

Through AM-5000 system, all CERIO's Managed Access Points are managed through a unified Web interface. Make sure all Managed Access Points are under good conditions. It is a simple task to keep the firmware of Managed Access Points up to date. The device management is especially important for a wide area deployment.

Wireless and Wired Access Controller System

Multiple Authentication Methods and Accounting

CERIO's AM-5000 Wireless Controller system Built-in AAA Radius Base Controller Combined with CERIO's CenOS 5.0 Captive Portal Authentication Solution provides a perfect high-performance environment for wired/or wireless authentication, authorization, and accounting networks.

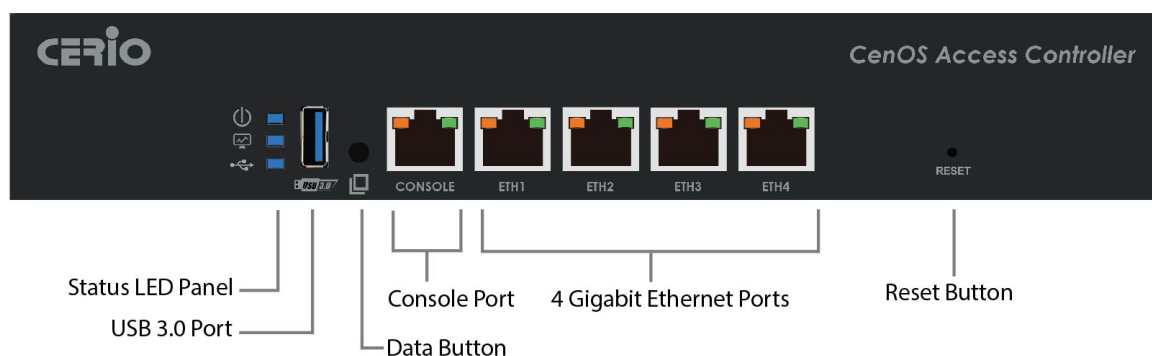www.cerio.com.tw   +(866) 2-8911-6160   issales@cerio.com.tw
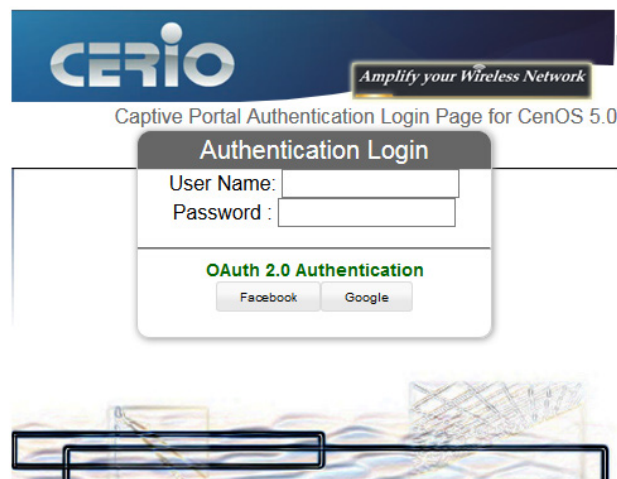
Hotspot technology allows Internet providers to offer Internet access to customers, while applying certain Internet use rules and limitation. It is convenient for Internet cafes, hotels, airports, schools and universities. The Internet provider gets complete tracking records of per customer time spent on the network, data amount sent/ received, real-time accounting and more.

To begin browsing, a client must go through a registration process with the provider, then enter a Passcode of access ticket in a browser Login window that appears on the attempt to open a webpage. Hotspot technology proposes providers to establish and administrate a user database, which can be useful for enterprise such as airports, hotels or universities that offer wireless or Ethernet Internet connectivity to employees, students, guests or other groups of users.

Zero Configuration for Users

AM-5000 makes Internet access very easy and user-friendly. Users will be redirected to the provider's welcome page automatically regardless of their PC configuration. The **IP Plug and Play** feature will accept and translate fixed company IP settings and web proxy configurations, so that users do not have to reset their corporate IP or web settings. Outgoing users e-mails can be redirected to the operator's mail server in order to facilitate to e-mail forwarding for foreign subscribers. The recipient sees the messages as it was sent from the users' home provider.

Hardware Overview

Status LED Panel

USB 3.0 Port

Console Port

Data Button

4 Gigabit Ethernet Ports

Reset Button

Software Specifications

Access Controller	• Max : 500 Access Points per Controller , • Provide Local Account : 5000 • Side access control system with unlimited number of Wireless client users
Centralized AP Management / Control	• AP Group management –maintain a set of setting templates that simplify the task to assign the same setting to multiple APs • AP-Automatic configuration and provisioning by AM-5000 • Locally maintained configuration profiles for managed APs • Auto discovery for managed APs

🌐	• Automatic recovery of APs in case of system failure • Central firmware Upgrade-Select multiple APs and upgrade their firmware at the same time , including bulk upgrade • Remote Firmware upgrade • Zero configuration to restore broken AP's setting onto its replacement AP • Provides MAC address Control list of client stations for each managed APs • Support Roaming – Intra-Switch , Inter-band , Inter-Switch • Provide centralized remote management via HTTP/SNMP interface • Support MIB's : 802.11, 802.1X, MIBII, RADIUS authentication, RADIUS Accounting • SYSLOG support including remote servers • Log-system log : operator action log
AP Monitoring	• Monitor AP Status • The number of associated clients to the AP • The AP RF information • Associated Station List • Monitoring IP List • Load balancing based on number of users • Load balancing based on utilzation • AP User Statistic –Maintain all wireless clients connection history and depict statics in diagrams • Support Monitor IP on third-party APs • Alert-Summarize abnormal status in the alert window • System alarms and status reports on managed APs o TP Topology Monitor-list monitored device ; periodic update on device status • AP life check-real time tracking monitors APs status (AP Health Checking)
Radio Management	• Automatic Channel Assignment and power setting for controlled APs • Simultaneous air monitoring and end user service • Self-healing coverage based on dynamic RF condition • Dense deployment options for capacity optimizations • Multiple BSSID per Radio : 8 • Hot Standby at AP mode (support fail-over a standby AP) • Load Balance to another available AP (Real time users limitation) • Coverage interference detection
Wireless Security / Encryption	• WPA / WPA2 personal and enterprise • WEP40/64 and 104/128-bit • TKIP: RC4-40 and AES(CCMP): 128bit (FIP-197) • SSL and TLS: RC4 128-bit and RSA1024 and 2048 bit

🌐	• EAP-TLS , EAP-TTL/MSCHAPv2 • IEEE802.1X network login user authentication (EAP-MD5/TLS/TTLs) and • RADIUS server authentication (RFC2618)

Authentication	• Authentication: single sign-on (SSO) client with authentication integrated into the local authentication environment through local/domain, LDAP(AD), PoP3, RADIUS, 802.1x and Guest
	• Authentication Type
	   o IEEE802.1X(EAP,LEAP,EAP-TLS,EAP-TTLS,EAP-GTC,EAP-MD5)
	   o RFC2865 RADIUS Authentication
	   o RFC3579 RADIUS Support for EAP
	   o RFC3748 Extensible Authentication Protocol
	   o MAC Adress authentication
	   o Web-based captive portal authentication

Authorization	• Authorization : access control to network resource such as protected network with intranet, internet, bandwidth, VPN, and full stateful packet
Accounting	• Provides billing plans for pre-setting / on-demand accounts • Enables session expiration control for On-demand accounts by time(Hours) and data volume (MB) • Detailed per-user traffic history based on time and data volume for both local and on-demand accounts • Support local on-demand and external RADIUS server • Contain 10 configurable billing plans for on-demand accounts • Provide session expiration control for on-demand accounts • Support automatic email network traffic history
Network	• 802.3 Bridging • Support Walled garden (free surfing zone) • Binding VLAN with Ethernet and Wireless interface
System Management	• Three administrator accounts • Provide customizable login and logout portal page • CLI access (Remote Management) via Telnet and SSH • Remote firmware upgrade (via Web) • Utilities to backup and restore the system configuration directly to USB Flash memory • Full Statistics and Status Reporting • Ping Watchdog • SNMP v1,v2c ,v3 , Support MIB-II • SNMP Traps to a list of IP Address

🌐	• NTP Time Synchronization • Administrative Access : HTTP / HTTPS
Log	• Even Syslog • Status monitoring of on-line users • IP-based monitoring of network devices • Interface connection status • Support Syslog for diagnosing and troubleshooting • User traffic history logging • User's session log can be sent to ftp or Syslog server • Remote Syslog reporting to external server

Standards & Hardware Specifications

CPU Clock Speed
Dual Core 880MHz CPU

Console Port
1 RJ45

USB 3.0 Port
1 USB3.0

Reset Switch Built-in
Push-button momentary contact switch

Ethernet Configuration
10/100/1000 BASE-TX auto-negotiation Gigabit Ethernet port x 4 (RJ-45 connector)

Built-in LED Indicators
1* Power 1* Status 1* USB Storage

Environmental & Mechanical Characteristics

Operating Temperature
0 °C ~ 50 °C

Storage Temperature
-20 °C ~ 75°C

Operating Humidity
10% - 80% Non-Condensing

Storage Humidity
5% - 90% Non-Condensing

Power Supply
110 – 220V AC Power; 12 VDC input.

Dimensions (W x H x D)
265mm x 178mm x 44mm

Weight
1.035kg

Form Factor
Desktop, Metal Case

Certifications
CE , FCC , RoHs compatible

Package Contents

Contents :	
AM-5000 Main Unit	x1
Power Adapter	x1
CD Manual	x1
Warranty Card	x1