

# **DR-3000**

CenOS5.0 Access Controller with VPN Gateway

EAN Code: 4712757159097



## Introduction

CERIO's DR-3000 CenOS5.0 System Access Controller with VPN Gateway is designed for applications in which a compact, cost-effective " all-in-one" networking solution is required. CERIO DR-3000 included Hot spot authentication and policy forced firewall, intelligent 4 Gigabit Ethernet Port for Load balance, Wireless LAN controller, IP Gateway 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 DR-3000 is a full-featured Wireless LAN Giga Ethernet security controller that aggregates up to 60/128 access points (APs), built-in 5000 local accounts /5000 ondemand accounts and delivers centralized control and security for wireless deployments.

CERIO's DR-3000 can serve up to 500 simultaneous users, applies to public access network such as network management guest access, hospitality deployments which require reliability, efficiency, and security. It supports Hotspot Router / Firewall/ HA / VPN/ Multi-WAN / Captive portal /QoS enforcement and 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.

## Wireless and Wired Access Controller System

Multiple Authentication Methods and Accounting

CERIO's DR-3000 Wireless Gateway 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.



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.

### **Strong hardware VPN engine**

CERIO's DR-3000 Multifunction VPN Router is an easyto-use, flexible, high-performance device well suited for small businesses. Now with web filtering, the new DR-3000 delivers highly secure, broadband, wired connectivity to small offices and remote employees. It can also be used either as a standalone router for flexible deployments, offering investment protection as your business needs evolve.

#### **Centralized Access Points Management**

Through DR-3000, 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.

## Zero Configuration for Users

DR-3000 makes Internet access very easy and userfriendly. 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 user 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.

#### Quota

As broadband usage proliferates coupled with the alarming rise of file sharing trend, in certain cases, it is important to assign quota for user bandwidth consumption, particularly in the education institutions, hot spots, or in a community with shared Internet access provider subsystem.

DR-3000 supports two different quota mechanisms: prepaid and periodical, in order to meet different reallife business needs. The quota system can also be integrated with external accounting and billing systems.

#### Multi-WAN Support Outbound Load-Balancing

With real-time load balancing and Optimum Route algorithm, DR-3000 intelligent router engine directs each session or connection to the best available link. It also supports policy-based routing, persistent routing, and traffic scheduling to effectively adapt your business policy into your network policy.

### **Bandwidth Management**

By filtering out unexpected traffic, DR-3000 optimizes bandwidth utilization and ensures the best transmission quality for the transfer of mission-critical data.

### Protocols Traffic Management

**DR-3000** is capable of analyzing and managing many layer-7 protocols such as VoIP protocols (H.323 and SIP), Video Conferencing, ERP, and various IM protocols.





With such layer-7 filtering (or scan) capability, DR-3000 empowers business communications and improves efficiency by providing network quality of service management.

### **Firewall Policy**

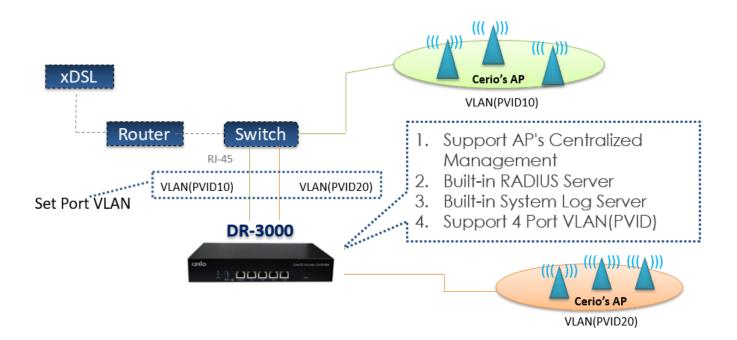
Both the NAT mode and DMZ mode are supported that they can maintain the existing network infrastructure without reconfiguring. The DR-3000 provides policybased firewall protection and Anti-blocking hacker DoS attack to network device to enhance the security of local network easily.

#### Policy-Based Access Control List

Firewall access policies are user definable and can be based on source or destination, type of service, and IP address. It is also implemented in conjunction with traffic scheduling policy. DR-3000 supports specific Layer-7 protocols such as P2P, IM, and H.323 for better network management. The DR-3000 provides Content Blocking feature to block specific URL, Scrip, IM, P2P and download file.

## **Support 3 Modes Application**

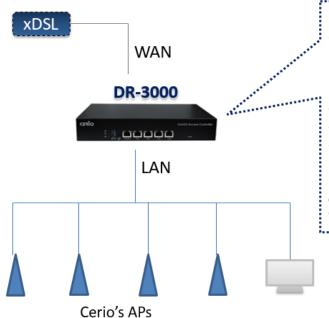
## I. . Control Mode





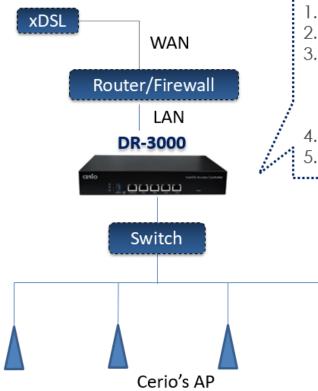


## II. . Router Mode



- Hotspot gateway function
- Hotspot authentication support local account / Radius account / On-Demand / Pre-generated / guest / POP3 and LDAP account etc.
- Support 3WAN Load balance
- Built-in independent VPN processing chip
- Support AP's centralized management
- Built-in RADIUS Server
- Built-in firewall and filter by Policy
- 8. Support High Availability
- Built-in System Log Server

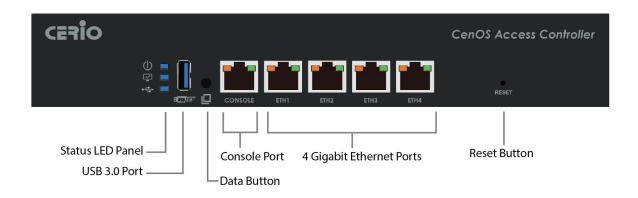
## III. Captive Portal



- 1. Web authentication for captive portal
- 2. Support web login page customized
- 3. Hotspot authentication support local account / Radius account / On-Demand / Pre-generated / guest / POP3 and LDAP account etc.
- 4. Support AP's centralized management
- Built-in System Log Server



## **Hardware Overview**



# **Software Specifications**

	Max: 60/128 Access Points per Controller.
Access Controller	Max : 500 client per Controller.
	Provide Local Account : 5000.
	AP Group management –maintain a set of setting templates that simplify the task
	to assign the same setting to multiple APs.
	<ul> <li>AP-Automatic configuration and provisioning by DR-3000.</li> </ul>
	<ul> <li>Locally maintained configuration profiles for managed APs.</li> </ul>
	Auto discovery for managed APs.
Centralized AP	Central firmware Upgrade-Select multiple APs and upgrade their firmware at the
Management /	same time , including bulk upgrade.
Control	Remote Firmware upgrade.
	Provides MAC address Control list of client stations for each managed APs.
	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.
	Monitor AP Status.
	The number of associated clients to the AP.
	Associated Station List.
AP Monitoring	Monitoring IP List.
	Load balancing based on number of users.
	AP User Statistic – Maintain all wireless clients connection history and depict statics
	in diagrams.

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	System alarms and status reports on managed APs.
	<ul> <li>TP Topology Monitor-list monitored device; periodic update on device status.</li> </ul>
	<ul> <li>Automatic Channel Assignment and power setting for controlled APs.</li> </ul>
	<ul> <li>Simultaneous air monitoring and end user service.</li> </ul>
	<ul> <li>Self-healing coverage based on dynamic RF condition.</li> </ul>
Radio Management	<ul> <li>Dense deployment options for capacity optimizations.</li> </ul>
Nadio Management	Multiple BSSID per Radio : 8
	<ul> <li>Hot Standby at AP mode (support fail-over a standby AP).</li> </ul>
	<ul> <li>Load Balance to another available AP (Real time users limitation).</li> </ul>
	Coverage interference detection.
	<ul> <li>IEEE802.11p Class of Service/Quality of Service (CoS /QoS).</li> </ul>
	IEEE802.11e Wi-Fi Multimedia (WMM).
	Differv Codpoint (DSCP).
Bandwidth	Traffic Analysis and Statistics.
Managermant	Diff/TOS.
	IEEE 802.1Q Tag VLAN priority control.
	IGMP Snooping for efficient multicast delivery.
	Upload and Download Traffic Management.
	WPA / WPA2 personal and enterprise.
	<ul> <li>WEP40/64 and 104/128-bit.</li> </ul>
	<ul> <li>TKIP: RC4-40 and AES(CCMP): 128bit (FIP-197).</li> </ul>
Wireless Security / Encryption	SSL and TLS: RC4 128-bit and RSA1024 and 2048 bit.
	• EAP-TLS , EAP-TTL/MSCHAPv2.
	<ul> <li>IEEE802.1X network login user authentication (EAP-MD5/TLS/TTLs ) and.</li> </ul>
	RADIUS server authentication (RFC2618).
	Provides billing plans for pre-setting / on-demand function.
	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
Hotspot functions	on-demand accounts.
	Support local on-demand and external RADIUS server.
	<ul> <li>Contain 10 configurable billing plans for on-demand accounts.</li> </ul>
	Provide session expiration control for on-demand accounts.
	Support automatic email network traffic history.
	Authentication: single sign-on (SSO) client with authentication integrated into the
Authentication	local authentication environment through local/domain, LDAP(AD), PoP3,
	RADIUS, 802.1x and Guest.
	Authentication Type.



	<ul> <li>IEEE802.1X(EAP,LEAP,EAP-TLS,EAP-TTLS,EAP-GTC,EAP-MD5).</li> </ul>		
	o RFC2865 RADIUS Authentication.		
	o RFC3579 RADIUS Support for EAP.		
	<ul> <li>RFC3748 Extensible Authentication Protocol.</li> </ul>		
	<ul> <li>MAC Adress authentication.</li> </ul>		
	<ul> <li>Web-based captive portal authentication.</li> </ul>		
Authorization	Authorization : access control to network resource such as protected network with		
Authorization	intranet, internet, bandwidth, VPN, and full stateful packet.		
	Outbound Fault Tolerance and loadbalance for WAN port.		
Load Balancing	Multiple Domain Support.		
	By Traffic.		
	Built-in DoS attack protection.		
	Inspection Full statefull packet filter.		
	Access Control List.		
Firewall	Layer 7 Protocol Blocking.		
riiewaii	Multiple Domain Support.		
	Support MAC Filter.		
	Support IP Filter.		
	Active Firewall Session 60000.		
	• Support static IP , Dynamic IP(DHCP Client ) , PPPoE and PPTP on WAN connection.		
	DHCP Server Per Interface; Multiple DHCP Networks.		
	• 802.3 Bridging.		
	Support NAT.		
	IP/Port destination redirection.		
	DMZ server mapping.		
Network	Virtual server mapping.		
	H.323 pass-through.		
	Support Static Routing.		
	Support Walled garden (free surfing zone).		
	Binding VLAN with Ethernet and Wireless interface.		
	<ul> <li>Support MAC-address and IP –address pass through.</li> </ul>		
	Support IP Plug and Play ( IP PnP ).		
	Support HA backup function.		
	<ul> <li>Provide customizable login and logout portal page.</li> </ul>		
System	CLI access (Remote Management ) via Telnet and SSH.		
Management	Remote firmware upgrade (via Web).		
	Utilities to backup and restore the system configuration directly to USB Flash		
	memory.		
	:		



	Full Statistics and Status Reporting.
	Real time traffic monitor.
	Ping Watchdog.
	• SNMP v1,v2c ,v3.
	SNMP Traps to a list of IP Address.
	Support MIB-II.
	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.
	<ul> <li>Support Syslog for diagnosing and troubleshooting.</li> </ul>
	User traffic history logging.
	<ul> <li>User's session log can be sent to ftp or Syslog server.</li> </ul>
	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

## **Package Contents**

Contents	
DR-3000 Main Unit	x1
Power Adapter	x1
CD Manual	x1
Warranty Card	x1

## **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 (WxHxD)

265mm x 178mm x 44mm

#### Weight

1.03kg

## Form Factor

Desktop, Plastic Case

## **Production Location**

TW Only

#### Certifications

CE, FCC, RoHs compatible

