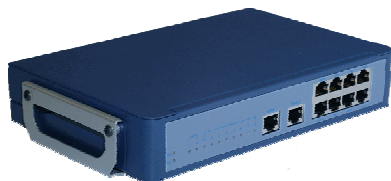


Cipherium M3000



M3000

is a Network Access Controller, specially designed for wired and wireless data network environments in small to middle scaled businesses and hotspots. It features integrated management, secured data transmission, and enhanced accounting and billing.

System administrators can effectively monitor wired or wireless users, including employees and guest users via its user management interface.

Moreover, administrators can discover, configure, monitor, and upgrade all managed Access Points (APs) from a single, centralized AP management interface.

Key Features

- VPN secured network technology
- Single login account roaming across APs
- Centralized AP management
- Role-based and policy-based access control
- Virtual Service Zones
- Multiple authentication methods, fail-over and load-balancing on dual WAN ports
- On-demand guess account provisioning and management
- Per-user bandwidth control
- Credit card billing system and multiple billing plans for Internet access
- Customizable login templates
- User traffic report

Benefits

Simplified LAN Deployment and Management Platform

- Easy integration with the existing network infrastructure.
- Friendly interface with centralized management platform; no need for IT outsourcing.
- Customizable login page templates for your company logo or art design.

Powerful Network Security Capabilities

- Advanced IPSec VPN encryption to enhance the security of wired and wireless data transmission.
- Data packet filtering through built-in firewall improves the management of data transmission.
- Diverse user authentication methods, including Local and On-demand accounts, POP3, LDAP, RADIUS, Windows Domain, and SIP authentication.

Comprehensive User Management

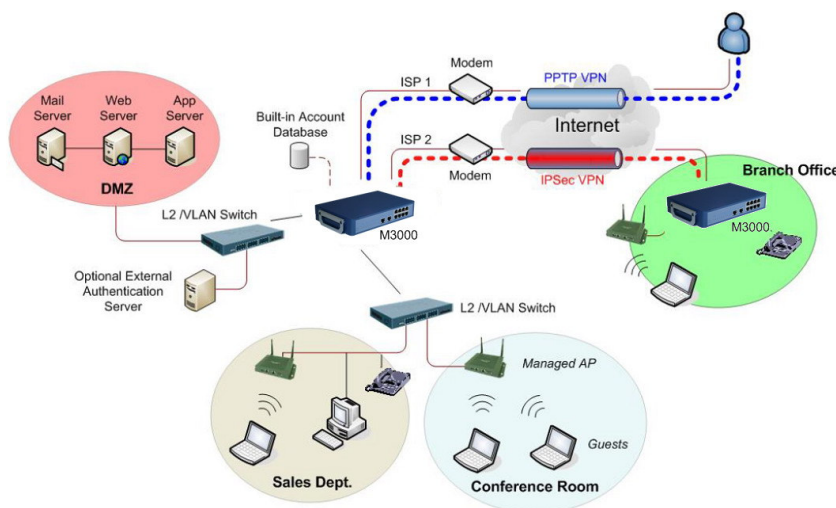
- Service Zone function allows up to 9 virtual partitions of the physical network; Different network policies and can be assigned to each user group in each Service Zone for offering various service levels.
- Role-based and policy-based control policies enhance the protection against malicious users.
- Provide detailed per-user network traffic log for analysis and record keeping.
- Per-user bandwidth limit enables flexible traffic control for different scenarios.

Centralized Access Point (AP) Management

- Centralized remote control and automatic AP discovery.
- Management and monitoring of APs via the management interface, including AP's system settings, online status, enabling/disabling, reset, and firmware upgrade.
- Periodically monitors APs and forces problematic APs to reset

Flexible Accounting and Billing

- Configurable billing profiles allow operators to customize the billing plans for on-demand users.
- Billing report gives a summary of transaction records for on-demand users.
- Bandwidth control enables different class of service for different level users and maximizes profits for businesses.



A Deployment Example with Service Zone

Cipherium M3000

Networking

- Support NAT or Router mode
- Support Static IP, DHCP, PPPoE on WAN interface
- Choose freely which LAN is authentication-enabled LAN
- Support NAT (a) IP/Port destination redirection (b) DMZ server mapping (c) virtual server mapping (d) H.323 pass-through
- Built-in with DHCP Server and support DHCP relay
- Support walled garden (free surfing zone)
- Support SMTP redirection
- Support MAC-address and IP-address pass-through
- Support HTTP Proxy
- Support IP Plug and Play (IP PnP)
- Support configurable static routes
- Contain built-in hardware-based VPN accelerator
- Support dual uplinks, outbound load balancing and failover for more reliable Internet connection
- Support SIP pass-through NAT

Service Zones

- The network is divided into maximum nine Service Zones, each defined by a pair of VLAN tag and ESSID
- Each service zone has its own (a) login portal page (b) redirected home page (c) authentication options (d) LAN interface IP address (e) DHCP address range
- Each service zone allows access to the selected groups
- Each service zone assigns a network policy to each user group

User Management and Guest Accounts

- Authentication methods supported: Local and On-demand accounts, POP3, LDAP, RADIUS, Windows Domain, and SIP authentication
- Single-Sign-On for Windows Domain
- Allow MAC address and user identity binding for local user authentication
- Support MAC Access Control List
- Support auto-expired guest accounts
- Users can be divided into user groups
- Each user group has its own network properties, including bandwidth, QoS, accessible service zones, and other privileges
- Support QoS and WMM traffic types: Voice, Video, Best Effort and Background
- Each group (role) may get different network policies in different service zones
- Max concurrent user session (tcp/udp) limit
- A setting for user-idle-timeout
- Configurable user Black List
- Instant guest account generation by authorized users
- Export/Import local users list to/from a text file
- Definable session limit in policy puts a cap to each user's concurrent sessions (tcp/udp)

Security Features

- Support data encryption: WEP(64/128-bit), WPA, WPA2, IPSec VPN
- Support various authentication methods: WPA-PSK, WPA2-PSK, IEEE 802.1x (EAP-MD5, EAP-TLS, CHAP, PEAP)
- Provide VPN termination of IPSec tunnels
- Support VPN pass-through (IPSec and PPTP)
- Built-in DoS attack protection

AP Management

- Provide centralized remote management via HTTP/SNMP interface
- Auto Discovery for Managed APs
- Enable or disable APs easily via user interface
- Templates for Managed APs
- Monitoring Managed AP for its status, the number of associated clients, and RF info
- Recover APs automatically when the system fails
- Upgrade managed APs centrally, including bulk upgrade
- Monitor 3rd party non-integrated AP

Monitoring and Reporting

- Status monitoring of online users
- IP-based monitoring of network devices
- Uplink (WAN) connection failure alert
- Support Syslog for diagnosis and troubleshooting
- User traffic history logging
- Traffic history report via email to administrator
- Users' session log can be sent to ftp or Syslog server

Accounting and Billing

- Support local on-demand and external RADIUS server
- Contain ten configurable billing plans for on-demand accounts
- Support credit card billing system by Authorize.net and PayPal
- Provide session expiration control for on-demand accounts
- Provide detailed per-user network traffic history for both local and on-demand user accounts
- Support automatic e-mail to report network traffic history

System Administration

- Support web-based management user interface
- Provide customizable login and logout portal page
- SSH remote management
- Remote firmware upgrade
- NTP time synchronization
- Menu driven console management interface
- Utilities to backup and restore the system database

Hardware Specifications

- Form Factor: Mini-desktop
- Dimensions (W x D x H): 243 mm x 150 mm x 45.5 mm
- Weight: 1.4 Kg
- Operating Temperature: 0 ~ 45C
- Power: 110~220 VAC, 50/60 Hz
- WAN Ports: 2 x 10BASE-T/100BASE-TX RJ-45
- LAN Ports: 8 x 10BASE-T/100BASE-TX RJ-45
- Console Port: 1 x RJ-11
- LED Indicators: 1 x Power, 2 x WAN, 8 x LAN
- Certifications: CE, FCC

Capacity and Performance	M3000
Concurrent Users	120
Local Accounts	500
Instant Guest Accounts	2,000
Managed APs	12
Monitored 3 rd -party APs	40
VPN Termination Tunnels	120
VPN 3DES/DES Throughput	30 Mbps