4ipnet®

Secure WLAN Controller WHG301

The **4ipnet WHG301 Secure WLAN Controller** with built-in 500 local accounts and 2,000 on-demand accounts is an ideal solution for medium to larger-scale hotspot deployments, such as in hotels, hospitals, convention centers, libraries, airport terminals, and MDUs/ MTUs. The WHG301 integrates **"secure access control", "visitor account provisioning", "flexible accounting and billing",** and **"high-speed secure wireless connection"** into one box to fulfill the needs demanded by a public wireless network. It also provides advanced functions suitable for larger networks to accommodate more users with multiple APs to cover a wider service area.

FEATURES & BENEFITS

Easy Operation and Reliable Internet Connection
- Various broadband deployment options support (T1, DSL, Cable) via static IP, DHCP, PPPoE, and PPTP.
- On-demand account generation provides user accounts for visitor-based operations.
- Load balancing and WAN failover functions enhance bandwidth utilization with reliable Internet connection.

Powerful Network Security Capabilities
- Standards-based data encryption: WEP, WPA, WPA2, IEEE 802.1X, and IPSec VPN.
- Secure guest and administrator access using web-based login and administration over SSL.
- Diverse user authentication methods, including Local and On-demand accounts, POP3, LDAP, RADIUS, Windows Domain, and SIP authentication.
- Built-in DoS protection keeps malicious hackers from collapsing the network.
- Site-to-site VPN tunnels across different locations allow hotspot venues to securely connect with one another and share the same account database.

Comprehensive User Management
- Role-based access control enhances the protection against malicious users.
- Service Zone function partitions a physical network into up to 9 virtual networks, each with its own definable access control profiles. Hotspot owners can provide different customers and staff with different levels of network services.
- Individual 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 managed APs via web-based administration interface, including AP's system settings, online status, enabling/disabling, reset, and firmware upgrade.
- Periodically monitors APs and notifies administrator of problematic APs.

Flexible Accounting and Billing
- Configurable billing profiles allow operators to customize billing plans for on-demand users.
- Billing report gives a summary of transaction records for on-demand users.
- Support online payment with credit card through Authorize.net and PayPal.
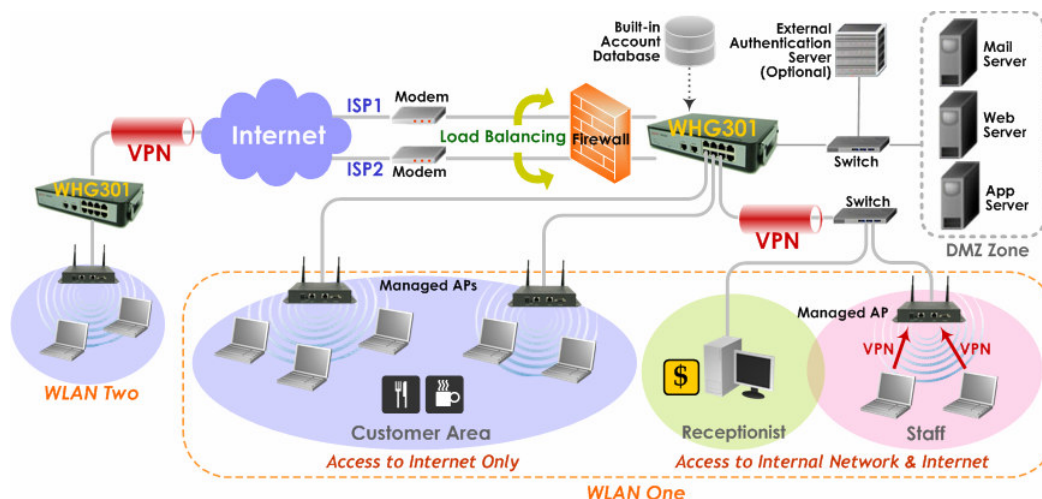
Networking
- Support NAT or Router mode
- Support Static IP, DHCP, PPPoE mode on WAN interfaces and PPTP (WAN 1 only)
- Choose freely which LAN is authentication-enabled LAN
- Support NAT:
  - (1) IP/Port destination redirection
  - (2) DMZ server mapping
  - (3) Virtual server mapping
  - (4) H.323 pass-through
- Built-in with DHCP Server and support DHCP relay
- Support walled garden (free surfing zone)
- 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

Security
- 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)
- Local IPSec VPN tunnels: 120
- Support VPN pass-through (IPSec and PPTP)
- Built-in DoS attack protection

Service Zones
- The network is divided into maximum 9 Service Zones, each defined by a pair of VLAN tag and ESSID
- Each service zone has its own (1) login portal page (2) authentication options (3) LAN interface IP address (4) 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
- Support 500 local accounts and 2,000 on-demand accounts
- Provide on-demand accounts for visitors
- Support Local user account roaming
- 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
- 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)

Accounting and Billing
- Support local on-demand and external RADIUS server
- Contain 10 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 configuration

Monitoring and Reporting
- Status monitoring of on-line 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

AP Management
- Number of managed APs: 12
- 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
- Monitor managed AP for its status, the number of associated clients, and RF information
- Upgrade managed APs centrally, including bulk upgrade
- Monitor 3rd party non-integrated APs: 40

Physical and Power
- Power Adapter: 100~220 VAC, 50/60 Hz
- Form Factor: Mini-desktop
- Dimensions (W x D x H): 9.6" x 5.9" x 1.8" (243 mm x 150 mm x 45.5 mm)
- Weight: 2.8 lbs (1.29 kg)

Connectors and Display
- 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, 1 x Status, 2 x WAN, 8 x LAN

Environment
- Operating Temperature: 0 ~ 45 ∘C

Certifications
- CE, FCC
- RoHS compliance