



The **4ipnet WHG501 Secure WLAN Controller** with built-in 10,000 local accounts, 6,000 on-demand accounts, and Gigabit Ethernet is an ideal security solution for medium to larger-scale WLAN deployments, including enterprises, campuses, hotels, airport terminals, and MDUs/ MTUs. The WHG701 integrates “**secure access control**”, “**visitor account provisioning**”, “**flexible accounting and billing**”, and “**centralized WLAN management**” into one box to provide simplified manageability and instant mobility. With more powerful hardware, WHG701 is capable of managing up to 150 access points centrally to cover a wider service area in a larger network.

FEATURES & BENEFITS

Simplified Deployment and Reliable Internet Connection

- Gigabit Ethernet to meet higher data rate demands of larger networks.
- Easy to deploy, highly scalable platform allows overlay with existing wired/wireless infrastructure without disruption.
- Load balancing and WAN failover enhance bandwidth utilization and provide more 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 built-in Local and On-demand database; supports external authentication servers including POP3, LDAP, RADIUS, Windows Domain, and SIP registrar.
- Built-in DoS protection keeps malicious hackers from collapsing the network.
- Site-to-site VPN tunnels allow branch offices to securely connect with one another and share the same account database.

Comprehensive Access Control and User Management

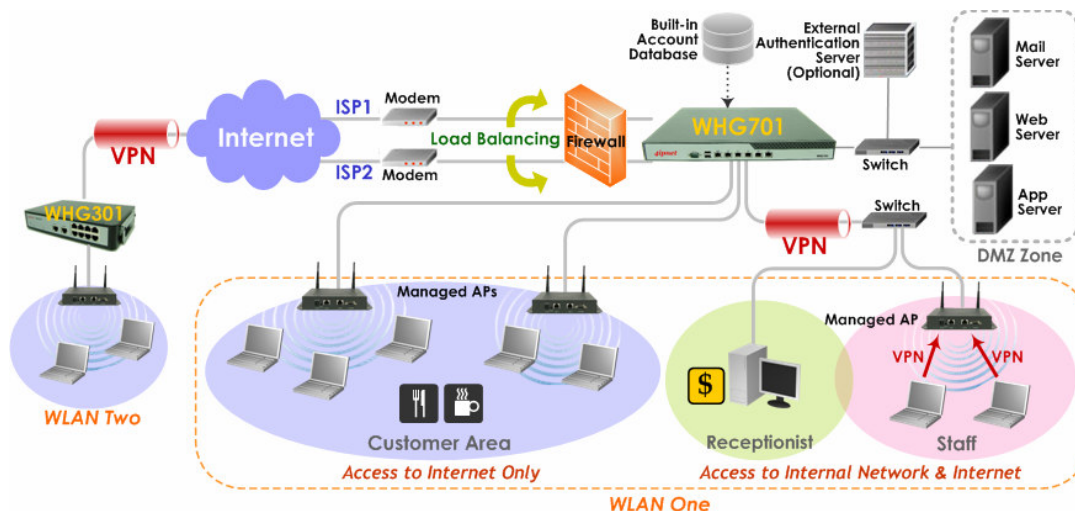
- Role-based access control and policy enforcement offer management of privileges for different user groups.
- On-demand account generation provides secure and managed user accounts to visitors.
- Service Zone function partitions a physical network into up to 9 virtual networks, each with its own definable access control and group policy profiles. Allows hotspot owners to provide various levels of customized 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 the administrator of problematic APs.

Flexible Accounting and Billing

- Configurable billing profiles allow operators to customize billing plans 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)
- Support local IPsec VPN tunnels
- Support PPTP VPN tunnels
- Support site-to-site VPN tunnels
- 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) redirected home page (3) authentication options (4) LAN interface IP address (5) 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 Access Control

- Support 10,000 local accounts and 6,000 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: 150
- 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 information
- Upgrade managed APs centrally, including bulk upgrade
- Monitor 3rd party non-integrated AP: 400

Physical and Power

- Power Adapter: 90~264 VAC, 47~63 Hz
- Form Factor: 19" 1U Rack Mount
- Dimensions (W x D x H): 431 mm x 361 mm x 44.4 mm
- Weight: 7.2 kg

Connectors and Display

- WAN Ports: 2 x 10/100/1000 BASE-T RJ-45
- LAN Ports: 4 x 10/100/1000 BASE-T RJ-45
- Console Port: 1 x RS-232 DB9
- LED Indicators: 2 x WAN status, 4 x LAN status

Environment

- Operating Temperature: 0 ~ 40 °C

Certifications

- CE, FCC
- RoHS compliance