PheeNet

We Connect the World

WAS-105R

IEEE802.11n Wireless Hot Spot Gateway Kit with On-demand and Pre-set concept 3A (Authentication, Authorization, Accounting)

802.11n 2T2R MIMO | Authentication | / Authorization | / Accounting

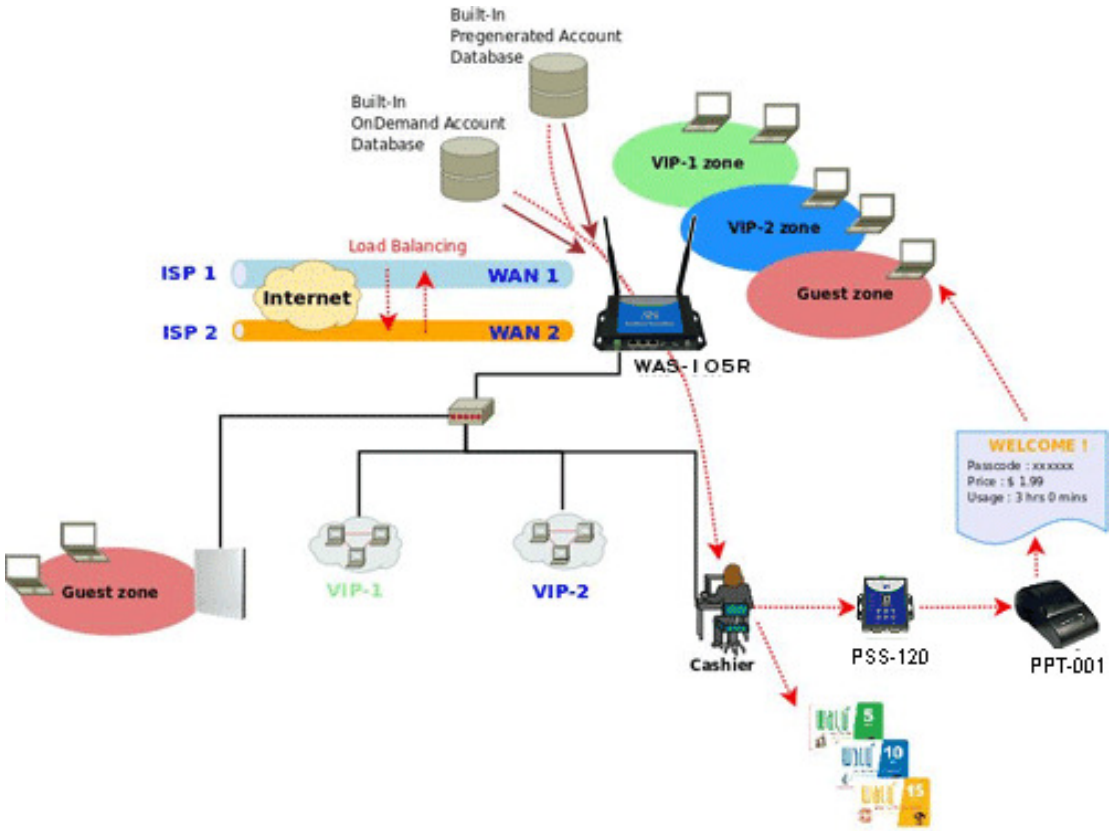
IEEE802.3af POE | Load Balance / Fail Over | Bandwidth Management QoS

PheeNet WAS-105R is a Wireless Hotspot Gateway Kit, which compliance with IEEE802.11 standard, and provide data rate up to 300 Mbps.

WAS-105R applies to public access network such as Wireless Hotspot, network management for guest access, hospitality deployments – which require reliability, efficiency, and security. WAS-105 combines an IP Router /Firewall, Multi-WAN /QoS enforcement and Access Controller for use in wireless hotspot environments. One single WAS-105R can serve up to 100 simultaneous users, takes control over authentication, authorization, accounting and routing to the Internet as well as to the operating central. Built-in AAA system allows hotspot owners set up public access services without extra RADIUS server.

With PheeNet WAS-105R, it provides additional sources of revenues for a better Return on Investment (ROI). Your business or organization can provide customers or guests wireless Internet connection with zero configuration and bandwidth management while protecting your private network.

APPLICATION



Features

User Management

- Support 100 simultaneous authentication users
- Max 3069 Accounts
- Support Pre-setting authentication users, On-Demand Users and Local Radius Accounts.
- Users Session Management
- Configurable user Black list (with Time-based control)
- Allows MAC address and user identity binding for local user authentication
- SSL protected login portal page
- Supports multiple login with one single account
- Session idle timer
- Login Session idle time out setting
- Session and account expiration control
- Notification email to provide a hyperlink to login portal page
- User Log and traffic statistic notification via automatically email service

- Login time frame control
- Session limit
- Real-Time Online Users Traffic Statistic Reporting
- Support local account roaming
- Seamless Mobility : User-centric networking manages wired and wireless users as they roam between ports or wireless APs

Authentication

- Authentication: single sign-on (SSO) client with authentication integrated into the local authentication environment through local/domain, LDAP, RADIUS, MAC authentication, and 802.1x
  - Customizable Login and Logout Portal Pages
  - Customizable Advertisement Links on Login Portal Page
- User authentication with UAM (Universal Access Method), 802..1x /EAPoLAN ,MAC address
- Allow MAC address and users identity binding for local user authentication
- No. Of Registered RADIUS Servers : 2
- Support MAC control list (ACL)
- Support auto-expierd guest accounts
- Users can be divided into user groups
- Each Service Domain has its own network properties and bandwidth control
- Max simulanous user session (TCP/UDP) limit
- Configurable user black list
- Export/Import local users list to/from a text file
- Web-based Captive Portal for SSL browser-based authentication
- Authentication Type
  - IEEE802.1X(EAP,LEAP,EAP-TLS,EAP-TTLS,EAP-GTC,EAP-MD5)
  - RFC2865 RADIUS Authentication
  - RFC3579 RADIUS Support for EAP
  - RFC3748 Extensible Authentication Protocol
  - MAC Adress authentication
  - 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 firewall releases

Accounting :

- Provides billing plans for pre-setting accounts
- Provides billing plans for on-demand accounts
- Enables session expiration control for On-demand accounts by time(Hours) and volume
- 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
- Support credit card billing system by Authorize.net and PayPal
- Provide session expiration control for on-demand accounts
- Support automatic email network traffic history

Wireless

- Transmission power control : 7 Levels
- Channel selection : Manual or Auto
- No. of associated clients per AP : 32
- Setting for max no associated clients : Yes
- No. of BBSID (Virtual AP) : 8
- No. of Max. WDS setting : 4 (8)
- Preamble setting : Short / Long
- Setting for 802.11b/g/n mix, 802.11b only or 802.11 g only or 802.11n only
- Setting fortransmission speed
- IEEE802.11f IAPP (Inter Access Point Protocol) , hand over users to another AP
- IEEE802.11i Preauth (PMSKA Cache)
- IEEE802.11d Multi country roaming
- Automatic channel assignment
- Secure wireless bridge connects access points without wire
- Monitoring and reporting
- IP-Based monitoring of network devices
- TX Power Control
- Auto channel selection by hardware push button

Security

- Layer 2 User Isolation
- Blocks client to client discovery within a specified VLAN
- Setting for TKIP/CCMP/AES key’s refreshing periodically
- Hidden ESSID support
- Setting for “ Deny Any “ connection request
- MAC Address Filtering (MAC ACL)
- Support Data Encryption : WEP(64/128-bit), WAP, WAP2
- Support various authentication methods : WPA-PSK,WPA-RADIUS,IEEE802.1X
- Support VPN pass-thourgh
- Encryption Type
  - WEP: 64 and 128 bit
  - WAP-TKIP , WPA-PSK –TKIP, WPA-AES, WPS-PSK-AES
  - WAP2/802.11i :WPA2-AES, WAP2-PSK-AES, WAP2-TKIP, WPA-PSK-TKIP
  - Secure Socket Layer (SSL) and TLS : RC4 128-bit and RSA1024-bit and 2048-bit

ISP Domain

- The network is divided into maximum 8 group, each defined by a pair of VLAN tag and ESSID
- Each Domain has its own (1) login portal page (2) authentication options (3) LAN/ VLAN interface IP address range (4) Session number limit control (5) Traffic shaping
- Support VLAN Tag over WDS

Dual WAN

- Load Balancing
  - Outbound Fault Tolerance
  - Outbound loadbalance
  - Multiple Domain Support
  - By Traffic
- Bandwidth Management by individual and users group
- WAN Connection Detection

QoS Enforcement

- Packet classification via DSCP (Differentiated Services code Point)
- Traffic Analysis and Statistics
- Diff/TOS
- IEEE 802.1Q Tag VLAN priority control
- IEEE 802.11e WMM
- Automatic mapping of WMM priorities to 802.1p and IP DSCP
- U-APSD(Unscheduled Automatic Power Save Delivery)
- IGMP Snooping for efficient multicast delivery
- Upload and Download Traffic Management
- Support WMM Multiple Priority Level
- Scheduled Policies

Network

- Support static IP , Dynamic IP(DHCP Client), PPPoE and PPTP on WAN connection
- DHCP Server Per VLAN; Multiple DHCP Networks
- 802.3 Bridging
- Proxy DNS/Dynamic DNS
- Support NAT
  - IP/Port destination redirection
  - DMZ server mapping
  - Virtual server mapping
  - H.323, SIP, PPTP pass-through
- Built-in with DHCP server
- NTP Client
- Vitual DMZ

- Virtual Server (IP /Port Forwarding)
- Binding VLAN with Ethernet and Wireless interface
- Support MAC Filter
- Support IP Filter
- Time-based AP access control
- Support Walled garden (free surfing zone)
- Support MAC address and IP address pass through

System Administration

- Intuitive Web Management Interface
- Two 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
- Remote Link Test – Display connect statistics
- Full Statistics and Status Reporting
- Real time traffic monitor
- Ping Watchdog
- Traffic history report via email to administrator
- Users' session log can be sent by emaill
- Even Syslog
- Remote Syslog reporting to external server
- SNMP v1,v2c ,v3
- SNMP Traps to a list of IP Address
- Support MIB-II
- Spanning Tree Protocol
- NTP Time Synchronization
- Administrative Access : HTTP / HTTPS

Specification

Wireless Features	
Standard	IEEE 802.11b, g, n IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.11d IEEE 802.11h
Security	64 and 128 bit WEP WAP-TKIP , WPA-PSK –TKIP, WPA-AES, WPS-PSK-AES WAP2/802.11i :WPA2-AES, WAP2-PSK-AES, WAP2-TKIP, WPA-PSK-TKIP MAC Address Filter User Isolation- Hidden ESSID

Frequency Band	2.4GHz
Modulation	IEEE802.11b：DSSS (DBPK,DQPSK,CCK) IEEE802.11g/n：OFDM(64-QAM,16-QAM,QPSK,BPSK)
Receive Sensitivity	802.11b/g /n -90dBm@1Mbps, -86dBm@6Mbps,-84dBm@11Mbps,-69dBm@54Mbps
Output Power	100mW
Transmit Output Power Control	7 levels
Channel	802.11b/g/n : 11 for FCC,14 for Japan,13 for Europe, 2 for Spain, 4 for France
Antenna	2 x 5dBi Omni Antenna (Reverse SMA connector)

Hardware	
Base Platform	AR7240+AR9283
CPU Clock Speed	400 MHz
Flash	16MB
SDRAM	64MB
Interface	1 x DB9 Serial Port 1 x USB Port (Optional 3G interface radio with major brands – ODM only) 3 x 10/100BASE-TX auto-negotiation Ethernet port (RJ-45 connector) WAN * 2, LAN * 1 Auto MDI/MDI-X enabled , IEEE802.3af Power Over Ethernet Compatible , Auto Fail over
RF Channel Scan	Hardware Push-button to scan for a better channel to use
LED	1x Power, 2 x WAN ,1x LAN , 1x Status, 1x Busy, 1x Printer
Environment	Operating Temperature: -20 ℃ ~ 50 ℃ Storage Temperature: -20 ℃ ~ 60 ℃ Opeaating Humidity: 10~80%(non condensing) Storage Humidity: 5~90%(non condensing)
Power Supply	110 – 220V AC Power ; 12 VDC, 1.5A input. Support 802.3af Compliant , Power Over Ethernet (48V/0.3 A)
Mounting	Wall Mountable , Metal case compliant with IP50 standard
Dimensions	205 mm (L) x 125 mm (W) x 35mm (H), 600g
Certificate	FCC,CE, IP50,ROHS compliant

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