

WAS-105

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



Package Includes:

WAS-105R: IEEE802.11n Wireless Hot Spot Gateway

PSS-120: Intelligent Device Server

WP-T610: Ticket Thermal Printer

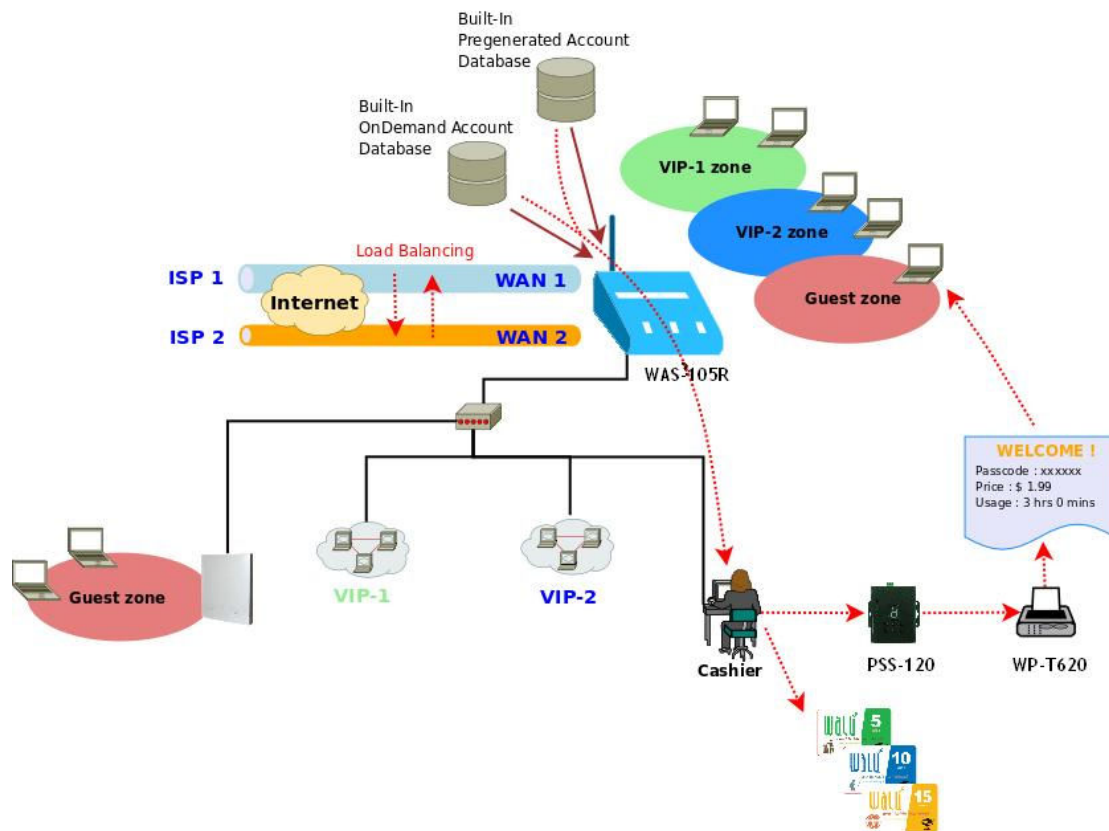


The WAS-105 is a Wireless Hotspot Gateway Kit, which compliance with IEEE802.11 standard, and provide data rate up to 300 Mbps.

WAS-105 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-105 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.

The WAS-105 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-expired guest accounts
- Users can be divided into user groups
- Each user group has its own network properties, including bandwidth, QoS, WMM traffic
- Each group (role) may get different network policies in different service domain
- Max simultaneous 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 Address 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)
- 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 (9)
- Channel selection : Manual or Auto
- No. of associated clients per AP : 32
- Setting for max no associated clients : Yes
- No. of BSSID (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
- Airtime performance protection prevents low-speed from down high-speed
- Setting for transmission speed
- IEEE802.11f IAPP (Inter Access Point Protocol) , hand over users to another AP
- IEEE802.11i Preauth (PMSKA Cache)
- IEEE802.11h Transmission Power Control
- IEEE802.11d Multi country roaming
- Automatic channel assignment
- Coordinated Access ensures optimal performance of nearby APs on the same channel
- Real-time monitoring and display of RF coverage and interference
- Secure wireless bridge connects access points without wire
- Automatic detection, classification , and containment of rogue access points
- Monitoring and reporting
- IP-Based monitoring of network devices
- Support Syslog for diagnosis and troubleshooting by email
- Traffic history report via email to administrator
- Users' session log can be sent by email or Syslog server

RF Management , Planning , Troubleshooting

- Radio Management
- Multi ESSIDs per AP
- Self-healing around failed Aps
- Load balancing based on number of users
- Load balancing based on utilization
- Time-based AP access control
- Auto channel selection by hardware push button

Security

- Layer 2 User Isolation
- Layer 2 AP 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-through
- 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 interface IP address range
- Each Domain allows access to the selected groups
- Each Domain assigns a network policy to each user group
- Support VLAN Tag over WDS

Dual WAN

- Load Balancing
 - ◆ Outbound Fault Tolerance
 - ◆ Inbound Loadbalance
 - ◆ 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
- Real time QoS Flow Plot

Firewall

- Built-in DoS attack protection
- Inspection Full statefull packet filter
- Access Control List
- Multiple Domain Support

Network

- Support NAT or Router Mode
- Support static IP , Dynamic IP(DHCP Client) , PPPoE 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 pass-through
- Built-in with DHCP server
- Support Static Routing
- NTP Client
- Vitual DMZ
- Virtual Server (IP /Port Forwarding)
- Binding VLAN with Ethernet and Wireless interface
- PPTP, IPSec Pass-through
- Support MAC Filter
- Support IP Filter
- Support Walled garden (free surfing zone)
- Support MAC address and IP address pass through
- Support configurable static routes
- Support SIP pass-throughput NAT

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
- Even Syslog
- Remote Syslog reporting to external server
- SNMP v1,v2c ,v3
- SNMP Traps to a list of IP Address
- Support MIB-II
- Support Static Routing
- Spanning Tree Protocol
- NTP Time Synchronization
- Administrative Access : HTTP / HTTPS

Specification

WAS-105R (Wireless Hotspot Gateway)	
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)
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WAS-105R Hardware

Base Platform	AR7240+AR9283
CPU Clock Speed	400 MHz
Flash	8MB
SDRAM	32MB
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 °C ~ 50 °C Storage Temperature: -20 °C ~ 60 °C Operating 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

PSS-120 (Intelligent Device Server Option)

Interface	2 x RS-232 DB-9M Ports (COM1: 1200 to 921600 bps, COM2: 9600 bps) 1 x 10/100 Ethernet Port
Management	Web management
Power Supply	DC Jack: 110 – 220V AC Power; 12 VDC, 1.A input. Screw Terminal Block : 12-60 VDC
Dimensions	116 mm (L) x 123 mm (W) x 27 mm (H), 300g

WP-T610 (Ticket Thermal Printer Option)

Printing method	Thermal line
Printing speed	60 mm/s
Resolution	203dpi
Fonts	Multilingual code page X12, Chinese, Japanese, Thai, Korean, Others
Character structure	Alphanumeric (Font A) : 12x24 Alphanumeric (Font B) : 9x17 Chinese : 24x24

Paper	Single-ply thermal paper roll Paper roll size: 57.5±0.5 (W) x 80 mm (Dia.) Paper thickness: 0.05~0.06 mm
Interface	RS-232
Power Supply	10 VDC / 3A
Dimensions	196 mm (L) x 126 mm (W) x 118 mm (H), 2100g