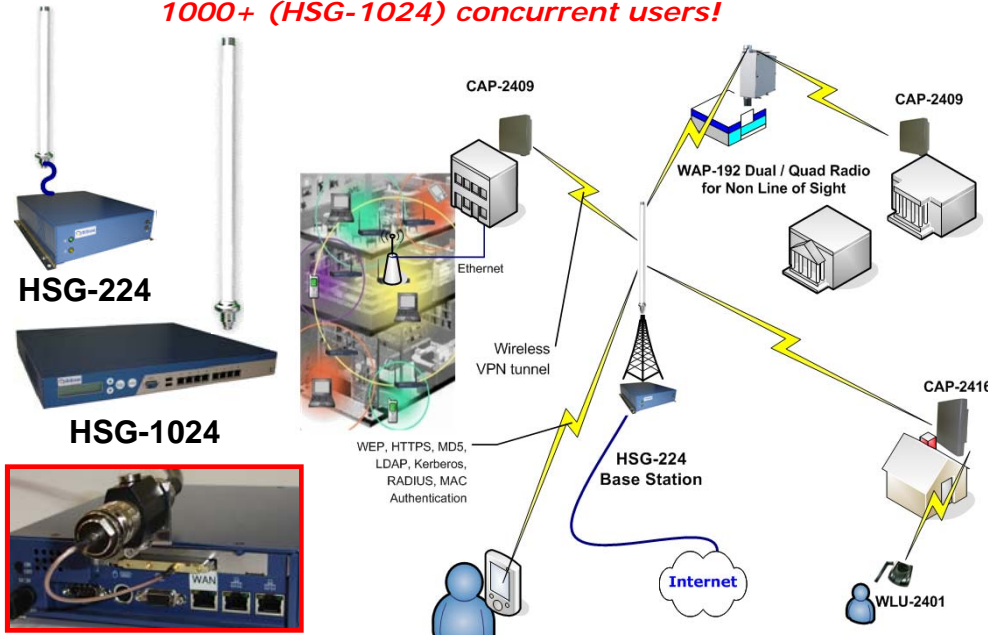


# WiBORNE, INC.

## Base Stations All-in-One-Box for Instant Deployment

*The Base-Station-In-A-Box package, Model OAB-20024, includes all the network equipments needed to install a wireless Hotspot / HotZone as well as end-user billing capabilities. Built in high power 802.11 radio boosts Wi-Fi community, while authenticated by local or remote authenticators for 250 (HSG-224) or 1000+ (HSG-1024) concurrent users!*



This solution is built with radio and controller as base station for deployment of short range HotZone. It supports hundreds of concurrent users. Ultra secure features such as wireless VPN tunnels with free client software, fully operated firewall templates, internal / external authenticators, and billing systems such as credit cards, prepaid cards. Optional intrusion detection / prevention systems are available too. It is reliability, capacity, efficiency, and ultra security.

Typical usages include mobile cars, residential community, corporate network, entire hotel, university campus, tourist attractions, harbor, or airport, as well as wireless Internet services (WISP). Additional outdoor CPEs are easy for plug and play, along with multiple radio nodes to support non Line-of-Sight (NLOS). This is ideal system for areas that are impossible to connect using wired alternatives, including networks separated by difficult terrain, railroads, or bodies of water.

### ❖ Features at a glance

- High power radio from 200mW to 370mW of 802.11 B for long-range and stable wireless signal.
- Bidirectional lightning protector with multi-strike capability
- Authorization with full stateful packet firewall
- Accounting/Billing for instant Hotspot
- Seamless wireless / wired IP roaming
- Large number of integrated Customer Premise Equipments (CPEs) and APs with centralized management.
- Up to 250 (HSG-224) or thousands (HSG-1024) simultaneous users
- Support Credit card gateways, prepaid cards
- 802.1X, VPN with VLAN Security for each clients.
- Millions of transaction records for database
- Remote administration and reconfiguring for Gateway and associated APs / CPEs
- Guest/Role accounts with Full Quality of Service (QoS) functions and priority
- Data Roaming among HSG gateways
- Walled Garden for redirection to customized pre/post/failure of authentication pages
- Optional Intrusion Detection / Prevention Systems
- Software backup for redundancy

### Functions

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- Range from 12dBi to 15dBi of high gain omni antennas is available with vertical or horizontal polarization
- High power 370mW to 200mW of 802.11b Prism radio module is integrated with receive sensitivity as -96dBm. No external booster needed. This is the most stable wireless signal available from market for all of 802.11 b/g clients. Optional Atheros modules are available.
- Lightning protector for bi-directional protection with multiple strike capability. Optional non-maintenance protector is available
- Ultra-durable industrial PC as hardware server. You would not need to worry about failure within warranty.
- Authentication (Walled Garden): single sign-on (SSO) client with authentication integrated into the local authentication environment through local/domain Kerberos, LDAP, RADIUS, MAC authentication, and 802.1x.
- Authorization: access control to network resources such as protected network with intranet, internet, bandwidth, VPN, and firewall rulesets.
- Accounting: sophisticated and complete billing system that generates account information and invoices, perform real-time credit-card processing. Interfaces based on PostgreSQL database are available to integrate with external billing/accounting systems and RADIUS servers.
- Intrusion detection and prevention systems to block potential hosts, with small footprints. 1000 more of signatures / alerts are available for customization.
- Redirection of clients to customized webpage of the hotspot provider, for authentication, billing, etc. Customizable company information, logo, web page and background.
- Clientless (VPN Bypass) mode for maximized hotspot efficiency. This also allows easy access to internet in a corporate environment while protecting sensitive information on the intranet.
- Secure clients via HTTPS for all platforms are provided as alternative to VPN.
- Where VPN is needed, open-standard IPsec and SSL/TLS protocols with AES, DES, 3DES, SHA-1, and Blowfish algorithms are supported to provide strong client-to-gateway integrity, authentication, and encryption for Windows 2000/XP/PocketPC, and most UNIX variants. No extra client licenses required.
- Accommodates a large number of 802.11 a/b/g APs of multiple vendors, with up to 250 concurrent users.
- Remote web based and serial console administration through SSL/TLS, configuration backup.
- Seamless IP roaming allows clients the freedom to move among connected APs.
- Quality of Service (QoS) allows role based control of inbound/outbound bandwidth by prioritizing traffic.
- Comprehensive firewall ruleset and templates allow extremely granular control over network traffic.
- 802.1X supported with EAP/TLS for port authentication.
- Guest/Role accounts can be dynamically defined and customized for VPN, bandwidth, billing, and are fully separated from the intranet for security. Also, local users policy management functions that include session time limits, time-of-day restriction, etc.
- Centralized AP logging, remote syslog server, real-time traffic monitoring and analysis system. Revocation of VPN and non-VPN clients for illegal usages.
- Performance: up to 100 Mbps unencrypted traffic for non-VPN clients, and 5 to 50 Mbps encrypted 3DES IPsec traffic for VPN clients.

## Protocols/Standards Supported

- Windows 2000, XP, PocketPC, MacOS, and most UNIX variants for VPN clients.
- WLAN DHCP server, DNS server, NTP time server, NAT gateway
- Protocols: 802.11 (a, b, or g variants), 802.1x, ARP, DNS, NTP, DHCP, ICMP, TCP/IP, UDP, NetBIOS, SNMP V2, HTTP, HTTPS, IPsec, AES, IKE(ISAKMP) and ESP tunnel modes, IPv4, IPv6, DES, 3DES, Blowfish, SHA-1 hashes, MD5, SSH, LDAP, RADIUS, Kerberos V (Heimdal), SSL, SSL2, TLS, SSH2, PKCS12, X.509.

## Standard Hardware Specs

- Processor: HSG-224: VIA 800 MHz with 256MB memory. HSG-1024: Intel Pentium IV, 2.8 GHz or above.
- I/O Ports: Intel RJ-45 port x3, RS-232 port x 1, VGA port x 1, keyboard/mouse port x 1, USB port x 2
- Storage Device: HSG-224: one 2.5" 40GB HDD. HSG-1024: one 3.5" 40GB HDD
- LED: HDD activity indicator, power on/off LED indicator
- Dimension: HSG-224: 177(W) x 228.6(D) x 51(H) mm, or 6.97" x 9.01" x 2";  
HSG-1024: 426(W) x 379.8(D) x 43.5(H) mm (16.8" x 14.95" x 1.72")
- LCD Panel: 2x16 characters LCD module with 4-buttons
- interface: HSG-224: 3XNIC; HSG-1024: 8XNIC, 4 are gigaports. System console port. One 2x5 pin-connector for LCD module, one VGA and 4 USB ports
- Rack mountable, One extra PCI expansion slot for HSG-1024
- Certificates: CE/FCC