

## Enterprise Intelligent Network Switch



AWG Series

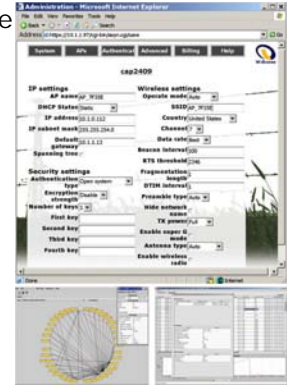


### Comprehensive Network Access Controller

The AWG Series, wires and wireless security controllers integrated with reconfigurable access points, delivers the secure, intelligent, and flexible management of wired or wireless local area networks (LAN / WLAN) for today's mobile and corporation workforce demands. This comprehensive *Network Access Controller* provides *authentication, validation, authorization, and auditing* services along with *quarantine* and *remediation* capabilities for endpoint systems that fail corporate IT compliance policies.

### Complete Network Coverage

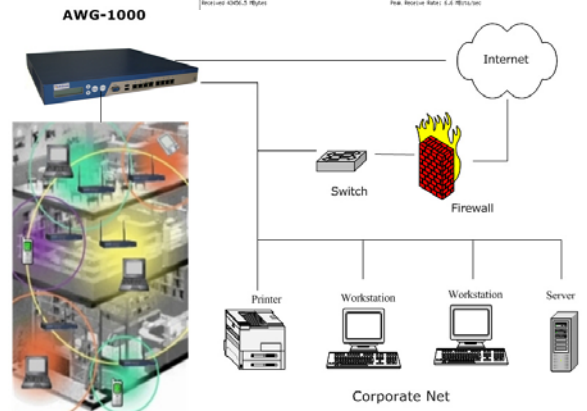
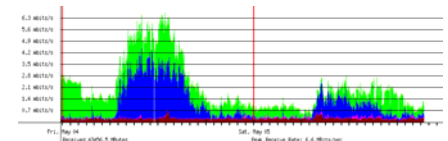
AWG provides complete Network Controller Lifecycle of services across a range of purpose built platforms for wired, wireless, remote access, and guest/visitor network deployments. AWG Series supports an entire organization's network applications requirements ranging from wired, directly connected laptops / desktops, to wireless employees, guests and contractors, to remote users and branch office users. AWG offers key access control functions, allowing organizations to *authenticate* users and endpoints, *validate* security compliance, *authorize* endpoints based on compliance states, *audit* device traffic for Trojan or malicious use, along with IP / bandwidth monitoring and network latency for specific network devices.



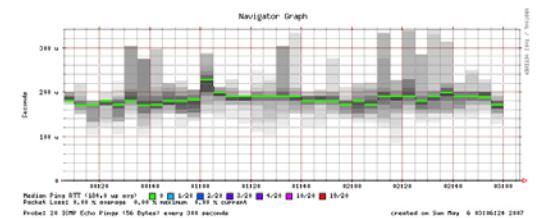
### Complete Enterprise Wired / Wireless Security Solution

The AWG Series scales to provide network access control for comprehensive security. By providing proactive validation measures and in-line policy enforcement, AWG ensures network security compliance and protection of critical assets.

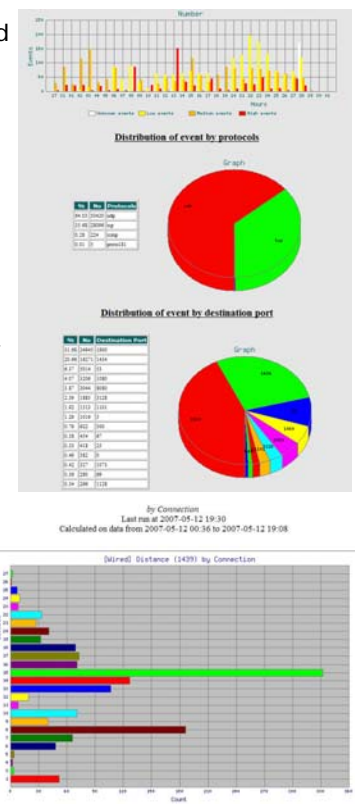
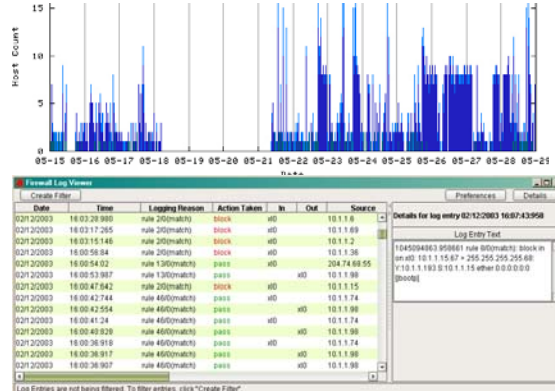
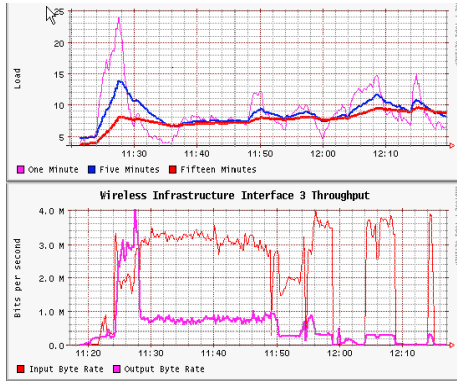
- Immediate cross-vender support for expandable number of external 802.11 APs or microwave
- Comprehensive stateful packet filter (firewall)
- Intrusion detection and prevention systems (IDS/IPS) to block potential hosts with signatures update automatically, with alerts saved to PostgreSQL database
- Proactive Wireless Monitoring with Wireless Intrusion Prevention System (WISP) on extending the IEEE 802.11f IAPP roaming and event rule
- Audit systems: IP monitoring, bandwidth monitoring, OS fingerprinting, network latency report, System real time monitoring, client session to disable illegal intruders
- Quality of Service (QoS) with VLAN, VoIP, 802.11 RF priority with packet classification and marking at L2-L4, 802.1p, DiffServ / TOS with optional WAP radio.
- Support for 802.11i, 802.1x with EAP/TLS extension
- WLAN DHCP server, NAT gateway, DNS server
- Centralized AP logging, configuration backup
- CARP Firewall failover and redundancy for backup
- Trunk network interface aggregation
- Optional integrated WAP-520 radio for base station that supports 900MHz, 2.4/2.7-2.9/3.5/5GHz, Intelligent RF for DFS (channels), Tx power with calibration for optimum RF performance
- Advanced Routing BGP, OSPF, RIP/RIP2
- SNMP MIB I, MIB II and 802.11 MIB support
- Dynamic and customizable guest accounts, with the intranet fully protected.
- Millions of transaction records from PostgreSQL for firewall logs, alerts, IP monitoring



### Wireless Connectivity



- Optional location tracking with LOC-1000 RTLS system
- Secure single sign-on integrated with existing user authentication databases (including MS Active Directory and Unix platforms) through Kerberos V, LDAP, and RADIUS. Detailed billing functions. SSL/TLS web administration,
- IPSec VPN and SSL VPN for client-to-gateway or gateway-to-gateway with free client software. Support 2,048 IPSec connection depends on hardware spec.
- Integrated Access Points Management and Security with fully integration of WAP-240/WAP-520 Atheros APs and RTL8186 based APs for dynamic transmit power (RF) management and control. Allow centralized management and administration of 1024+APs or higher
- SIP servers / telephony interface with Siproxd and Asterisk
- 3G routing interface with major PCMCIA radio cards
- AAA authentication with HSG-1000, Local authentication or external RADIUS
- CARP system redundancy active/active and passive/active for a possible failure of wireless controller



## Major Protocols

| Spec   | AWG Series  |
|--|---|
| <i>Authentication</i>                              | Microsoft Domains, Kerberos, LDAP, RADIUS, Active Directory, X.509 certificates, pre-authenticated MAC address, persistence of user sessions, HTTPS, SSL2, packet filtering. Single sign-on client with AP-based 802.1x (WPA) authentication, ACL, 802.11d, 802.11h, 802.11i when combined with WAP-240/WAP-520.  |
| <i>Encryption</i>                                  | 802.1x, Emerging WPA and 802.11i, SSL VPN, IPSec and IPv6 IPSec tunnel, AES, 3DES, Blowfish, SHA-1 hashes, MD5, SSH. Supports WPA2/AES/TKIP with WAP-520 radio.   |
| <i>User Managements</i>                            | Integrated VPN Servers, domain accounts, local guest accounts. VPN bypass option; Allow roaming between Access Points within the domains of mobility(L2, L3) roaming policies between APs, Roaming History, Location Tracking, Use of bandwidth Roaming denial/ 802.11e Quality of Service (QoS) policies and Bandwidth Management. VoIP Priority   |
| <i>WLAN Management</i>                             | When integrated with WAP-520, AWG support 256+ WLAN, multi-BSSID, with auto-configured VLAN, roaming with domain mobility with Layer 2 and 3. Mobility Profile with WAP-520. DFS and radio frequency management.  |
| <i>Performances</i>                                | Maximum up to 250 Mbps of 3DES IPSec, or up to 400 Mbps unencrypted traffic.  |
| <i>Real-Time Wired / Wireless Attack Detection</i> | Sniffing for wireless network topology, alert mapping, alert logs and databases. OS fingerprinting and packet capture triggers, Intrusion Detection / Prevention, Anti-Spoofing.  |
| <i>Supported Standards and Protocols</i>           | 802.11 (a/b/g/n), 802.1x, 802.1D and 802.1Q VLAN with Trunking via WAP-520, 802.3ad, ARP, DNS, NTP, DHCP, ICMP, TCP/IP, UDP, TFTP, SNMP, NetBIOS, SNMP V2, HTTP, HTTPS, IPSec, AES, IKE(ISAKMP) and ESP tunnel modes, IPv4, IPv6, Trace Route, CIDR, DES, 3DES, Blowfish, SHA-1, MD5, SSH, LDAP, RADIUS, Kerberos V (Heimdal), SSL, SSL2, TLS, SSH2, PKCS12, X.509, OSPF, BGP, RIP, SIP/SER, H.323, VOIP, CARP, PFSYNC, OSPFD, BPGD, GPRS, GSM, UMTS, HSDPA, 802.16e, RFC 1122 Host Requirements. |

## Typical Hardware Specs

- Processor / memory: P4 2.4+ GHz with 1GB DDR memory, or Celeron M 1.7GHz
- I/O Ports: Intel Ethernet Gbits 10/100/1000x4 (optional), RS-232, VGA, USB portx2, PCI/MiniPCI for WiFi/3G.
- Power 110/220 volt AC or 24 volt DC for vehicle mount
- Storage Device: One 3.5" 80GB HDD, 2.5" 40GB HDD, or CF card
- LED: Disk activity indicator, power on/off LED indicator
- Certificates: CE/FCC or UL



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