

# Next-Generation All-in-One Edge Gateway Solution





## OVERVIEW

The AirPro EG Gateway is a high-performance, next-generation all-in-one edge device, powered by a multi-core processor and a dedicated ASIC chipset. With superior performance and robust data processing capabilities, EG Gateway series offers wire-speed throughput and an industry-leading number of new connectivity options, surpassing traditional fire walls and broadband routers.

Gateway integrates a variety of essential network functions, including:

- Broadband router
- Hotel PMS
- Switch
- Traffic management and control
- Wireless controller
- Captive Portal – Voucher, OTP, Facebook
- Firewall
- VPN
- Network security
- Easy configuration

It is the ideal solution for small and medium enterprises, schools, government organizations, Hotel's, chain stores, medium-sized Internet cafes, operators, and other complex network environments.

Appearance	Description
 <p style="text-align: center;"><b>AP-EG320</b></p>	<ul style="list-style-type: none"> <li>• SMB Edge</li> <li>• 32 APs management capability</li> <li>• Recommended concurrent 300 users</li> </ul>
 <p style="text-align: center;"><b>AP-EG320-R1</b></p>	<ul style="list-style-type: none"> <li>• SMB Edge</li> <li>• 64 APs management capability</li> <li>• Recommended concurrent 500 users</li> </ul>
 <p style="text-align: center;"><b>AP-EG-520</b></p>	<ul style="list-style-type: none"> <li>• Campus Edge</li> <li>• 512 APs management capability</li> <li>• Recommended concurrent 2000 users</li> </ul>
 <p style="text-align: center;"><b>AP-EG-720</b></p>	<ul style="list-style-type: none"> <li>• Large Campus Edge</li> <li>• 1024APs management capability</li> <li>• Recommended concurrent 5000 users</li> </ul>

## KEY FEATURES AND HIGHLIGHTS

### Strong Performance with Advanced Hardware Architecture

The AirPro Gateway all-in-one edge device leverages multi-core processors and a dedicated ASIC high-speed switching engine, enabling the entire hardware platform to operate on a high-speed Ethernet architecture. This high-performance design ensures superior data processing capabilities, providing a solid foundation for advanced functions such as depth detection, traffic shaping, and the stable operation of security features, including firewall/VPN, IPv6, and other upper-layer software functionalities.

### Accurate Flow Control and Behavior Management

The EG Gateway offers precise flow control policies, allowing management based on applications, IP addresses, subscribers, protocols, and more. Users can configure maximum, minimum, and guaranteed bandwidth for both uplink and downlink traffic.

With the ability to identify over 200 protocols, Gateway enables fine-grained bandwidth guarantees and bandwidth control tailored to specific protocols. Additionally, it features an accurate NAT session limit, mitigating the risk of high session numbers caused by multi-process download tools or virus attacks.

### Rich Firewall Functions

The Gateway features robust anti-attack capabilities, offering detailed statistics and accurate analysis of various packet types, including ARP, IP, ICMP, TCP, UDP, and others. This enables the detection and blocking of attacks such as SYN Flood, DDoS, IP packet fragmentation

attacks, and IP address scanning attacks. Additionally, alarm notifications are provided to enhance network security and management.

Leveraging advanced state detection technology, gateway offers powerful anti-ARP mechanisms, including:

- IP + MAC binding
- ARP scanning
- Trusted ARP learning
- ARP filtering

The system automatically performs IP/MAC binding and applies anti-ARP mechanisms between clients and devices, further strengthening network security.

### Efficient and Easy Management and Maintenance

The Gateway all-in-one edge device features a fully graphical web-based management interface, simplifying the setup and management process. With the configuration wizard, connecting the gateway to the network takes just three easy steps.

The system supports various monitoring tools, including performance monitoring, failure alerts, virus/attack warnings, and more. Additionally, it provides comprehensive statistics and ranking information based on bandwidth and session data, making network management and maintenance both efficient and straightforward.

## PRODUCT SPECIFICATIONS

### Hardware Specifications

Item		AP-EG320	AP-EG320R1	AP-EG520	AP-EG720
CPU	Architecture	Intel Multi-core			
	Frequency	1GHz	1.2GHz	2.0GHz	2.4GHz
Memory		2G DDR III	2G DDR III	2G DDR III	4G DDR III
FLASH		NA	64G SSD	64G SSD	64G SSD
Interface	10/100/1000M Base-T	8	8	9	17
	SFP/RJ45 Combo	NA	2	4	4
Management port		1 RS-232 (RJ-45) console, 2 USB2.0 port			
Led		Power/ system Run/ port status			
Temperature		Operating 0°C-40°C			
		Storage -20°C-65°C			
Humidity		Operating 10%-85% Non-condensing			
		Storage 5%-95% Non-condensing			
Power Supply	Redundancy	No			Yes
	Range	AC 100-240V, 47-63Hz			
<b>Performance</b>					
Suggested Concurrent users		150	450	2000	5000
Suggested Export Bandwidth		100M	250M	1500M	2800M
Bidirectional Throughput	64 bytes	135Mbps	185Mbps	480Mbps	850Mbps
	1518 bytes	2000Mbps	2800Mbps	4500Mbps	6000Mbps
NAT	New session per second	8000	10000	30,000	40,000
	Max concurrent session	100K	300K	500K	1000K
VPN	IPsec Throughput (64 bytes)	20M	20M	40M	50M
	Max IPsec channel	10	20	300	1000
	Max L2TP access users	10	20	100	500
Web authentication users		100	300	1500	3000
Wi-Fi Access Controller	Default manageable APs	2	4	12	24
Controller	Maximum manageable Aps	32	64	512	1024

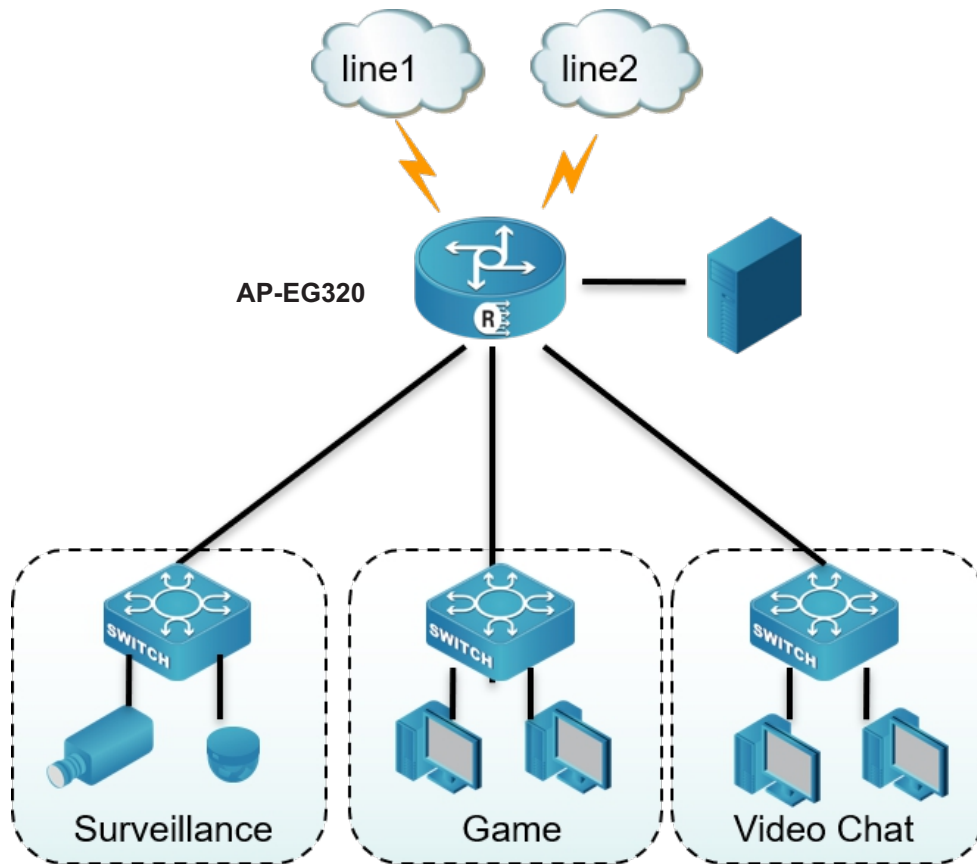
## PRODUCT SPECIFICATIONS

### Software Specifications

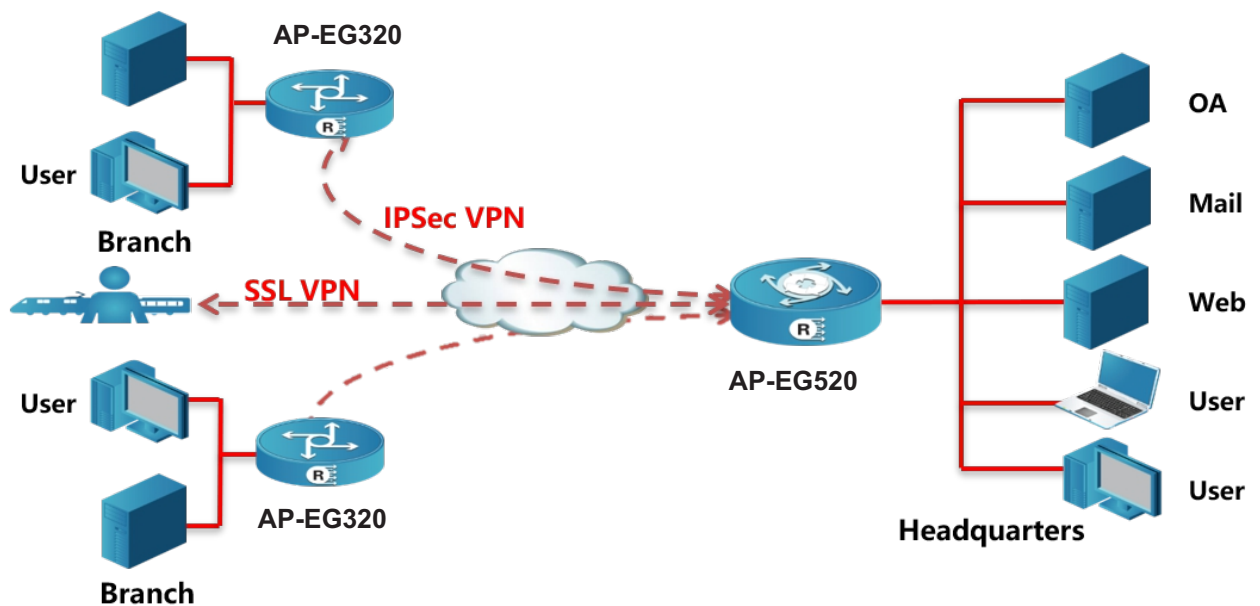
Main Features	EG Gateway Series
Working mode Network	Routing/ NAT/ Bridge
	PPPoE client, PPPoE chap / pap / any three authentication methods, PPPoE client reconnection DHCP Server, Client, relay DNS server, proxy DDNS
Routing	Static routing, static routing with priority PBR (based on source address, source port, a destination address, protocol, and other strategies), support next-hop IP or interface Equivalent multi-route load balancing, and bandwidth load automatically adjust the proportion of each route, to achieve load balancing based on the line. Multilink backup function, schedule link state detection, and automatic switching and back between links
NAT	Source NAT Static / Dynamic 1:1 NAT 1: N NAT N: N NAT Server Load Balancing Multi-protocol NAT ALG
QoS	IP-based bandwidth control Application-based bandwidth control Flow-based bandwidth control Bandwidth guarantee, bandwidth reservation, flexible bandwidth allocation 2 levels of bandwidth control (IP and application bandwidth control, port-based)
Attack protection	ARP attack defense mechanisms (arp learning, free arp, arp protection) IP-MAC binding, manual and automatic DoS, DDoS attack protection Flood protection: ICMP flood, UDP flood, SYN flood DNS queries flood protection: DNS queries & DNS recursive query flooding attack protection Malformed packet protection IP anomaly detection, TCP anomaly detection IP address scanning attack prevention, port scan protection Denial of Service Protection: Ping of Death, Teardrop, IP fragmentation, IP options, Smurf or Fraggle, Land, ICMP big packet
Session control	based on interface, source IP, destination IP, and applications (new sessions per second and the number of concurrent sessions) Timing session control
Access controller	802.11, 802.11a, 802.11b, 802.11g, 802.11n, 802.11d, 802.11h, 802.11i, 802.11e, 802.11k CAPWAP Wi-Fi management, configuration, monitor
System	Cloud Managed Dual image Firmware upgrade via WEB and TFTP Configuration backup and restore SNMPv1/v2 HTTPS\HTTP\TELNET\SSH NTP Web configuration wizard WEB authentication Object management based on IP addresses, protocols, schedule, and interface
Log and monitor statistics	Monitoring and statistics on interface traffic Monitoring and statistics on IP traffic Monitoring and statistics on session number based on IP address Monitoring and statistics on bandwidth and session number based on applications Monitoring and statistics on the number of attacks Monitoring and statistics on IP, application, and attacks based on Security domain Event log / traffic log / configuration log / alarm log / security log USB log backup
High reliability	Support link load balancing, link backup Multiple link failure detection mechanism

### Typical Application

Typical Application 1: Edge device, integrates functions of a broadband router, firewall, traffic management and control, network security.



Typical Application 2: Build VPN Connection between headquarters and branches



## ORDER INFORMATION

Product	Description
AP-EG320	All-in-one edge, with features of broadband router, firewall, switch, VPN, traffic management and control, network security, wireless controller, with ports of 8*10/100/1000M Base-T, 1*Console, 2*USB2.0. default with 2 units AP license, support controlling max.32 APs, suggest a maximum of 300 users.
AP-EG320R1	All-in-one edge, with features of broadband router, firewall, switch, VPN, traffic management and control, network security, wireless controller, with ports of 8*10/100/1000M Base-T, 2* 1000M Combo, 1*Console, 2*USB2.0. default with 4 units AP license, support controlling max.64 APs, suggest a maximum of 500 users.
AP-EG520	All-in-one edge, with features of broadband router, firewall, switch, VPN, traffic management and control, network security, wireless controller, with ports of 9*10/100/1000M Base-T, 4* 1000M Combo, 1*Console, 2*USB2.0. default with 12 units AP license, support controlling max.512 APs, suggest a maximum of 2000 users.
AP-EG720	All-in-one edge with features of broadband router, firewall, switch, VPN, traffic management and control, network security, wireless controller, with ports of 17*10/100/1000M Base-T, 4* 1000M Combo, 1*Console, 2*USB2.0. Suggest a maximum of 5000 users.



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