

Aphelion 600AG

802.11a/b/g Intelligent Sequential Outdoor Wireless Access Point

WiFi

2xRF



The Aphelion 600AG is an Intelligent Outdoor Wireless Access Point built with ruggedized and weatherized industrial design to withstand harsh outdoor environments. Available in both licensed exempt 5GHz and 2.4GHz spectrums, the Aphelion 600AG is designed with enhancements to avoid congestion and remain stable with high throughput under noisy wireless environment. Using Aphelion's patented Intelligent Sequential OS, multiple 600AG units can be daisy chained over the wireless interfaces to provide even greater coverage without a wired connection, forming large metro area Hotzones.

Low latency and high throughput over multiple wireless hops

- ((Dynamic Expansion Daisy chained wireless Hot Zones
- ((Low latency and high throughput upon multiple wireless hops
- ((Reliable performance when deploying multiple nodes in bridged or routed environments
- ((Bandwidth control module at subscriber level
- ((TCP/UDP Port and DSCP Level QoS

Comprehensive Security Features

- ((WPA-PSK / WPA-EAP with TKIP/ CCMP WPA Encryption Type support
- ((802.1x EAP-TLS / MD5 WEP Key support (Client and Server modes)
- ((64/128/152 bits Dynamic WEP keys
- ((Radius client
- ((Hide ESSID
- ((MAC address filtering
- ((NAT

Dynamic WAN Interface Configuration

- ((Flexible assignments of any wired or wireless interfaces as WAN links to adapt to different network topologies
- ((Bandwidth aggregation by logically combining multiple RF links to achieve super trunk mode for high bandwidth deployments
- ((Flexible wireless network distribution system
- ((Configurable Transmit-only and Receive-only mode per RF interface
- ((Flexible wireless network distribution system

System Management

- ((Firmware upgrade through TFTP, FTP
- ((Batch firmware upgrade tool for Windows PCs
- ((Interface status display
- ((Easy Configuration backup
- ((SMT Menu and Command Line via console (RS-232) and Telnet
- ((SSH Telnet
- ((Syslog
- ((SNMP v1/v2

Harsh outdoor environments to keep operation

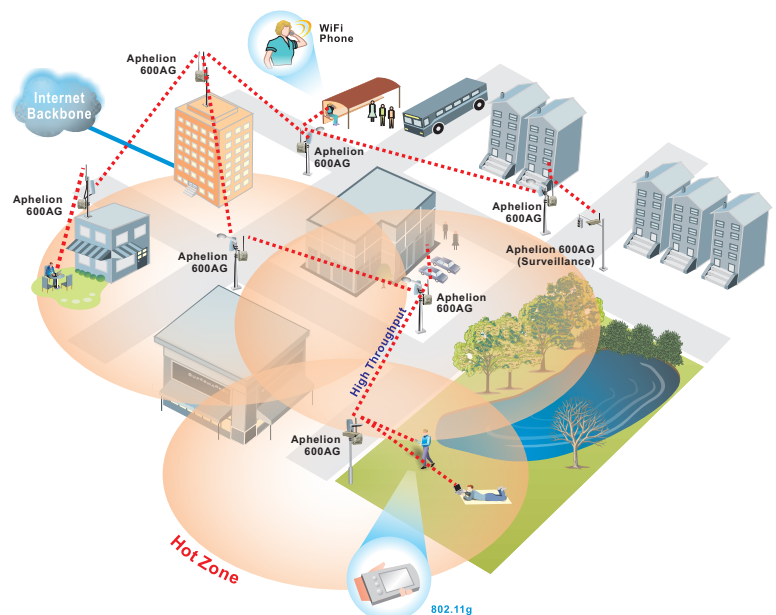
- ((Certified IP68 sturdy water-tight housing
- ((Built-in automatic thermal sensor and regulator module to facilitate deployment in cold regions

Simple Installation and Deployment

- ((Software Alignment / Deployment Tools
- ((Access Points Site Survey

Advanced Features

- ((Daisy Chain Mesh
- ((Trunking, Smart Traffic Load Balance, One Way Transmit, Failover
- ((Multi-ESSID VLAN
- ((Wireless Client Access Control
- ((Multi-Cast Filter



((■ Robust & Seamless Hot Zone through Sequential Hopping



Specifications



Standard Support

Wireless	IEEE802.11a, IEEE802.11b/g
Ethernet	IEEE802.3, IEEE802.3u, IEEE802.3af

Interface

Consol	RS 232 Port
Wireless	Antenna Connector: 2 x Reversed Female N-type
Ethernet	1x10/100 Base-T RJ-45 Power over Ethernet (PoE)

Memory

SDRAM	64 Mbyte
Flash	16 Mbyte

Ethernet

Max. Bandwidth	Full Duplex: 100Mbps (100Base), 10Mbps (10Base) Half Duplex: 50Mbps (100Base), 5Mbps (10Base)
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Physical Spec.

Power	<ul style="list-style-type: none"> DC 48Volt / 0.8A; AC Adapter 100V~240V Support Power over Ethernet (PoE)
Dimension	L x W x H: 226 x 197 x 79 mm
Weight	1700g
Dusty & Waterproof	IP68 Certified
Antenna	Reversed N-type (Option)

Regulation and Compliance

US	FCC Part 15 Class B & C & E
Europe	ETS 300 328, ETS 301 489-1&17, ETS 301 893 , EN 60950 compliant and CE Mark

Environment Spec.

Operating Temp	<ul style="list-style-type: none"> Non Heater : -30°C ~ 65°C With heater : -40°C ~ 65°C Built-in heater module is option
Storage	-40°C ~ 80°C
Humidity	0% ~ 95% non-condensing

System Setting

Interface Operation Mode	Access Point (AP) / Wireless Station (AP Client)
System Operation Mode	Bridge / Transparent Bridge / Router
Modulation Technique	<ul style="list-style-type: none"> ❖ 802.11b/g <ul style="list-style-type: none"> DSSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16-QAM, 64-QAM) ❖ 802.11a <ul style="list-style-type: none"> OFDM(BPSK, QPSK, 16-QAM, 64-QAM)
Channels Support	<ul style="list-style-type: none"> ❖ 802.11b/g <ul style="list-style-type: none"> US/Canada: 11 (1~11) Major European country: 13 (1~13) France: 4 (10~13) Japan: 11b: 14 (1~13 or 14th), 11g:13(1~13) China: 13 (1~13) ❖ 802.11a <ul style="list-style-type: none"> US/Canada: 12 non-overlapping channels (5.15~5.35GHz, 5.725~5.825GHz) Europe: 19 non-overlapping channel (5.15~ 5.35GHz, 5.47~5.725GHz, 5.745~5.825GHz) Japan: 4 non-overlapping channels (5.15 ~ 5.25GHz) China : 5 non-overlapping channels (5.725 ~ 5.85GHz)
Wireless Transmission Rate	802.11b/g: 11, 5.5, 2, 1 Mbps, auto-fallback, up to 54 Mbps 802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps, auto-fallback
Transmitted Power	802.11b mode: 17dBm 802.11g mode: 17dBm @ 6Mbps, 15dBm @ 54Mbps 802.11a mode: 15dBm @ 6Mbps, 13dBm @ 54Mbps
Wireless Other Setting	<ul style="list-style-type: none"> DHCP Client/Server, Fixed IP Routing Table Setting RIP v1&v2 Dual Image (Back up) MS NetBIOS IP Filter Enable/Disable Connecting Clients Isolation 802.11h- Dynamic Frequency Selection (Auto DFS) Wireless Station Fix AP MAC Address Optional
Receiver Sensitivity	<ul style="list-style-type: none"> ❖ Receiver sensitivity: (PER < 8% for 11b; PER < 10% for 11g & 11a) ❖ 802.11b Sensitivity: <ul style="list-style-type: none"> DBPSK (1Mbps) -93 dBm DQPSK (2.2Mbps) -92 dBm CCK (5.5Mbps) -90 dBm CCK (11Mbps) -88 dBm ❖ 802.11g Sensitivity: <ul style="list-style-type: none"> BPSK(6Mbps) -89 dBm BPSK(9Mbps) -88 dBm QPSK(12Mbps) -86 dBm QPSK(18Mbps) -85 dBm 16QAM(24Mbps) -83 dBm 16QAM(36Mbps) -80 dBm 64QAM(48Mbps) -77 dBm 64QAM(54Mbps) -72 dBm ❖ 802.11a Sensitivity: <ul style="list-style-type: none"> BPSK(6Mbps) -88 dBm BPSK(9Mbps) -87 dBm QPSK(12Mbps) -85 dBm QPSK(18Mbps) -84 dBm 16QAM(24Mbps) -82 dBm 16QAM(36Mbps) -80 dBm 64QAM(48Mbps) -76 dBm 64QAM(54Mbps) -71 dBm

Package Contents



- Aphelion 600AG 802.11a/b/g Intelligent Sequential Outdoor Wireless Access Point
- PoE Power Injector, Power Adapter & AC Power Cord
- 30M MIL-C-5015 IP68 Cat-5 Ethernet Cable
- 2M MIL-C-5015 IP67 RS-232 Consol Cable
- Consol Port Waterproof cover

- Wall Mounting Kit & Screw
- Mast Mounting Kit & Screw
- CD: User Manual
- Quick Installation Guide
- Grounding Wire

*If any of the above items are missing, please contact your reseller.

Aphelion

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