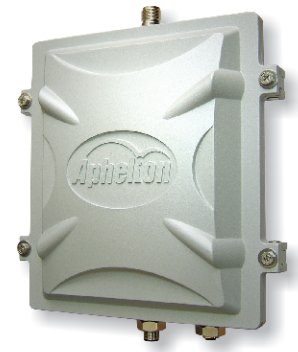
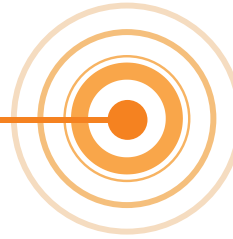


Aphelion 500AG / 505AG

802.11a/b/g Multi-functional Outdoor Wireless Access Point



The Aphelion 500AG is a multi-functional outdoor wireless AP Bridge in which it can be deployed either as standalone mode or as a Access point client to the Aphelion 600AG. With it's multiple functions; it can be used for point to point applications as well as point to multi-point applications while acting also as a client to work with Aphelion 600AG. With its built in 802.1x client for authentication, it will be the most ideal candidate for WISPs to deploy as a client device as appose to their existing AP infrastructure. This 5GHz and 2.4GHz wireless bridge conforms to IEEE 802.11 a/b/g standards and provides a clean and highly reliable wireless point-to-point (PtP) networking solution for distant locations or a point-to-multipoint (PtMP) bridge. Security features are Hide SSID / Multi- SSID, WEP 64/128/152 bit key encryption, 802.1x Client/ Server, Radius Client authentication, and MAC Address Filtering and can also support NAT and Roaming Function. The Aphelion 500AG will be the most ideal outdoor equipment for users who wish to deliver carrier class wireless services in multiple market segments such as campuses, hospitality, healthcare, warehousing etc. up to wider metropolitan areas.

Offers an Multi-functional Modes

- Access Point
- AP Client
- Bridge/Router

Comprehensive Security Features

- WPA with TKIP/AES support
- 802.1x EAP support (Client and Server modes)
- 64/128/152 bits Dynamic WEP keys
- Radius client
- Hide ESSID
- MAC address filtering
- NAT

Long Operating Range and Connect more Separate Networks

- Bridges in Point to Point (PtP) connect two networks in different locations through a single wireless link.
- Bridges in point-to-multipoint mode links more separate networks in scattered buildings through wireless links.

Harsh Outdoor Environments to Keep Operation

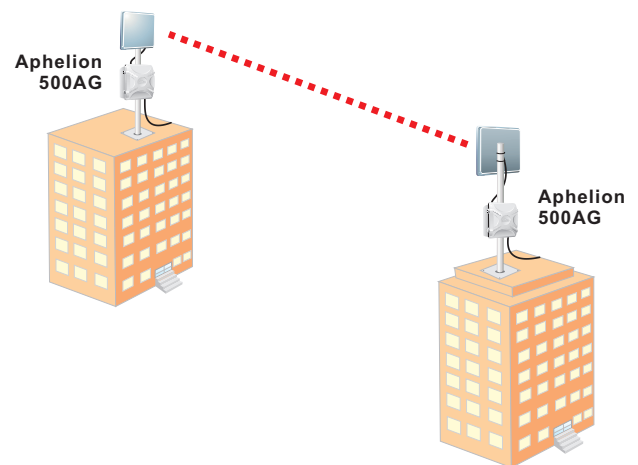
- Certified IP68 sturdy water-tight housing
- Built-in automatic thermal sensor and regulator module to facilitate deployment in cold regions
- PoE module

System Management

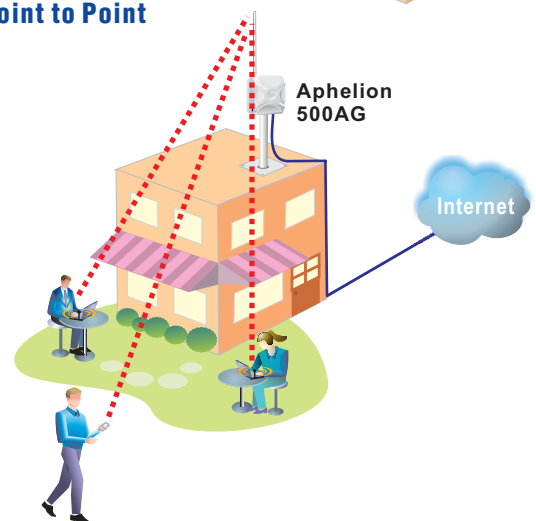
- Firmware upgrade through TFTP, FTP
- Interface status display
- SSH Telnet
- Syslog
- SNMP v1/v2
- Easy Configuration backup

Simple Installation and Deployment

- Software Alignment / Deployment Tools



■ Point to Point



■ HotSpot



Specifications

Standard Support

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

Interface

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

Memory

| | |
|-------|----------|
| SDRAM | 64 Mbyte |
| Flash | 8 Mbyte |

Ethernet

| | |
|----------------|---|
| Max. Bandwidth | Full Duplex: 100Mbps (100Base), 10Mbps (10Base) |
|----------------|---|

Wireless Security

| | |
|--------|--|
| SSID | <ul style="list-style-type: none"> Support Enable / Disable Broadcast Support Multi-ESSID |
| WEP | <ul style="list-style-type: none"> Support 64bit / 128bit / 152bit Data Encryption Authentication type: Open System / Shared Key |
| 802.1x | Support 802.1x Client and Server |
| Radius | Support Radius Client |
| WPA | Wi-Fi Protected Access (EAP, TKIP) |
| WPA2 | AES / 802.11i |
| MAC | Support MAC Address Filtering |

Configuration & Management

| | |
|---------------------|---|
| Software / Firmware | SMT management menu access via console, telnet and secure SSH telnet to implement including: System configuration & management, Firmware upgrade, Reset to default and configuration backup ...etc. |
|---------------------|---|

Physical Spec.

| | |
|--------------------|---|
| Power | <ul style="list-style-type: none"> DC 48Volt / 0.8A; AC Adapter 100V~240V Support Power over Ethernet (PoE) |
| Dimension | 226(L) x 197(W) x 79(H) mm |
| Dusty & Waterproof | IP68 Certified |
| Weight | 1600g |
| 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

| | | |
|----------------------------|---|--|
| Standard | AP / AP Client / Bridge / Router | |
| Frequency Range | <ul style="list-style-type: none"> • USA: 2.400~2.483GHz, 5.15~5.35GHz, 5.725~5.825GHz • Europe: 2.400~2.483GHz, 5.15~5.35GHz, 5.47~5.725GHz • Japan: 2.400~2.483GHz, 4.90~5.091GHz, 5.15~5.25GHz • China: 2.400~2.483GHz, 5.725~5.85GHz | |
| 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) • Japan: 4 non-overlapping channels (5.15 ~ 5.25GHz) • China: 5 non-overlapping channels (5.725 ~ 5.85GHz) | |
| Wireless Transmission Rate | <ul style="list-style-type: none"> • 802.11b/g: 11, 5.5, 2, 1 Mbps, auto-fallback, up to 54 Mbps • 802.11a: 54, 48, 36, 24, 18, 12, 9, 6Mbps, auto-fallback | |
| Transmitted power | Model: 500AG <ul style="list-style-type: none"> • 802.11b: 18 dBm • 802.11g: 18dBm @6Mbps • 15dBm @54Mbps • 802.11a: 17dBm @6Mbps • 13dBm @54Mbps | Model: 505AG (High Power RF) <ul style="list-style-type: none"> • 802.11b: 24 dBm • 802.11g: 24dBm @6Mbps • 21dBm @54Mbps • 802.11a: 20dBm @6Mbps • 16dBm @54Mbps |
| Wireless Other Setting | <ul style="list-style-type: none"> • Enable / Disable Broadcast SSID • MAC Address Filtering • Fixed Channel • DHCP Client / Server, Fixed IP • NAT • SNMP v1v2 • 802.1q VLAN-Multi SSID (ready on Q2,2006) • MAC Address Filtering • Bandwidth Control of Wireless Client • DHCP Client / Server, Fixed IP • MS NetBIOS IP Filter Enable / Disable • 802.11h - Dynamic Frequency Selection (DFS) & Transmit Power Control (TPC) • 802.11e WiFi QoS (ready on Q2,2006) • Wireless Station Fix AP MAC Address Optional • Software Alignment / Deployment Tools | |
| 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) -93dBm • CCK (5.5Mbps) -90dBm • DQPSK (2.2Mbps) -92dBm • CCK (11Mbps) -88dBm • 802.11g Sensitivity: <ul style="list-style-type: none"> • BPSK(6Mbps) -89 dBm • QPSK(12Mbps) -86 dBm • 16QAM(24Mbps) -83 dBm • 64QAM(48Mbps) -77 dBm • BPSK(9Mbps) -88 dBm • QPSK(18Mbps) -85 dBm • 16QAM(36Mbps) -80 dBm • 64QAM(54Mbps) -72 dBm • 802.11a Sensitivity: <ul style="list-style-type: none"> • BPSK(6Mbps) -88 dBm • QPSK(12Mbps) -85 dBm • 16QAM(24Mbps) -82 dBm • 64QAM(48Mbps) -76 dBm • BPSK(9Mbps) -87 dBm • QPSK(18Mbps) -84 dBm • 16QAM(36Mbps) -80 dBm • 64QAM(54Mbps) -71 dBm | |

Package Contents

- Aphelion 500AG / 505AG 802.11a/b/g Multi-functional Outdoor Wireless AP
- 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.



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