

WAP-4000

## 54/108 Mbps Wireless Access Point with Bridge



WAP-4000 is an IEEE 802.11g Wireless Access Point, uses 2.4GHz frequency band, the same as IEEE 802.11b; but it provides almost 5 times throughput rate than 802.11b. With the latest innovative Super G technology integrated, the maximum data rate of WAP-4000 is 108Mbps, which doubles the speed of standard 802.11g. WAP-4000 is also backward compatible and interoperable with IEEE 802.11b compliant wireless devices. Except for 64/128bit WEP encryption, WAP-4000 also integrates WPA (Wi-Fi Protected Access) and 802.1x authentication. Cooperating with a RADIUS server can make your wireless LAN more secure than ever. Provided with one reversed-polarity SMA male connector, WAP-4000 is easy to connect external antenna and booster to extend the wireless distance.

Five operational modes including AP, AP Client, Bridge, Multiple Bridge, and Repeater widen the usage of WAP-4000. Being a standard Wireless AP, WAP-4000 together with any other wireless access points provides the seamless integration between Ethernet network and Wireless network and also offers the roaming for all the Wireless mobile devices, with eXtended Range function, WAP-4000 can provide stable signal to the clients in long distance connection. AP client mode turns Ethernet devices into a wireless client. As switching to wireless bridging operation mode, having two or more LANs in different buildings connected is no more need to through physical and costly wires, WAP-4000 installed in these buildings soon provides 54Mbps transfer rate 24/7 without any additional costs. The repeater mode makes WAP-4000 acting as a wireless AP and bridge at the same time, which facilitates user to build up a large wireless network.

\* Only H/W v2 or above version supports Super G, Repeater mode, eXtended Range and SNMP protocol.

### ▶▶ KEY FEATURE

- Wireless LAN IEEE802.11g and IEEE802.11b compliant
- Strong network security with 802.1X authentication, and 64/128-bit WEP encryption
- Supports WPA (Wi-Fi Protected Access) for both 802.1X and WPA-PSK
- One detachable reverse-polarity SMA connectors can connect to external antenna for expanding connection distance
- Super G mode efficiently raises the data transfer rate up to 108Mbps
- Five operation modes selectable: AP / AP Client / Wireless Bridge / Multiple Bridge / Repeater
- Auto Fall-Back Data Rate for Long-Distance Communication and Noisy Environments
- Adjustable antenna transmit power
- Features Roaming, Best Access Point Selection, Load Balancing, and Network Traffic Filtering
- Support 63 clients to connect the network. (For best performance, the suggested maximum clients number of one WAP-4000 in AP mode is 25.)
- Provide Windows-base configuration utility and Web Configuration
- Support DHCP Server and Client
- Support MAC Filter
- Support eXtended Range mode

▶▶ SPECIFICATION

<b>Product</b>		802.11g Wireless Access Point	
<b>Model</b>		WAP-4000	
<b>Standard</b>		IEEE 802.11b, IEEE 802.11g	
<b>Signal Type</b>		DSSS (Direct Sequence Spread Spectrum)	
<b>Modulation</b>		BPSK / QPSK / CCK / OFDM	
<b>Port</b>		10/100Base-TX (RJ-45) * 1	
<b>Antenna</b>		Detachable Dipole Antenna * 1	
<b>Antenna Connector</b>		Reversed Polarity SMA Male	
<b>Output Power</b>		17dBm	
<b>Sensitivity</b>	802.11b	11 Mbps (CCK): -82 dBm 1, 2 Mbps (BPSK): -90 dBm (typically @PER < 8% packet size 1024 and @25°C + 5°C)	5.5 Mbps (QPSK): -86 dBm
	802.11g	54 Mbps: -72 dBm 36 Mbps: -76 dBm 18 Mbps: -82 dBm 9 Mbps: -89 dBm (typically @PER < 8% packet size 1024 and @25°C + 5°C)	48 Mbps: -72 dBm 24 Mbps: -79 dBm 12 Mbps: -86 dBm 6 Mbps: -90 dBm
<b>Operating Mode</b>		AP, AP Client, Bridge: Point to Point, Point to MultiPoint	
<b>Security</b>		64/128-bit WEP encryption Password Protect WPA for 802.1X and WPA-PSK MAC Filtering SSID Broadcast Disable function	
<b>Frequency Band</b>		2.4 GHz ~2.484GHz	
<b>Channel</b>		FCC: 11 Channels (US, Canada) TELEC: 14 Channels (Japan)	ETSI: 13 Channels (Europe)
<b>Data Rate</b>	Super G mode	Up to 108Mbps	
	802.11g	Up to 54Mbps (6/9/12/18/24/36/48/54)	
	802.11b	Up to 11Mbps (1/2/5.5/11)	
<b>Operating Environment</b>	Temperature	0~55°C	
	Humidity	5~95% (non-condensing)	
<b>LED</b>		Power: steady green WLAN: green for wireless connectivity/activity LAN: green for link, blink for activity	
<b>Power Requirement</b>		5V DC, 2.5A	
<b>Electromagnetic Compatibility</b>		FCC, CE	

▶▶ APPLICATIONS

- Enterprise or Campus Users**  
 In an enterprise or campus area, some mobile users may need a continuous network connection. By installing WAP-4000 in the area, mobile users can be always on the network by installing a wireless card in their notebook or PDA. The roaming capacity allows users connected to the network to transparently roam from one access point to another.
- Wireless ISP**  
 A first mile solution is now simple with PLANET's wireless devices. No wiring is needed and the provided bandwidth can be up to 54Mbps. By installing WAP-4000 equipped with omni-directional antenna in the user's neighborhood, all users around the AP can easily connect to Internet through the access point by installing a wireless PCI card or a WAP-4000 in AP client mode. By using a directional antenna, the distance between users and AP can be a few kilometers.
- LAN to LAN or LAN to Multi-LAN**  
 Wiring inside your own building may be an easy job, but it is hard if network cabling needs to route through some public areas or difficult wiring environments. WAP-4000 can work in bridge mode to provide a robust solution for connecting two or more buildings wired Ethernets together. By extending distance using PLANET's external antenna, the installation is easy and the distance between buildings can be 10km or more.



▶▶ ORDERING INFORMATION

- ▶ **WAP-4000**                      802.11g Wireless Access Point



**PLANET Technology Corp.**

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