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AirConnect® 11 Mbps Wireless LAN vs. 3Com® 11 Mbps Wireless LAN

Part I—Detailed Feature Matrix

NIC Features	3Com® 11 Mbps Wireless LAN (Speed Racer 2.0)	3Com AirConnect® 11 Mbps Wireless LAN 2.0 (Trilogy 2.0)	3Com AirConnect 11 Mbps Wireless LAN 1.0/1.5 (Trilogy 1.0/1.5)	Benefits
Retractable Antenna	Yes, XJACK®	No, Fixed	No, Detachable	Antenna extends for reception while in use and retracts back into the laptop while in transit.
Drivers	Win 2K, Win 98, Win Me, Win NT 4.0, Win 95b	Win 2K, Win 98, Win Me, Win NT 4.0, Win CE 2.11 & 3.0, Win 95b	\Win 2K, Win 98, Win NT 4.0, Win CE 2.11, Win 95b	
Power Save Protocol	Yes	Yes	Yes	Adaptive or user selectable performance against power consumption.
Ad-Hoc Mode	Yes	Yes	Upgradeable	Client to Client instant temporary networks. Wi-Fi interoperable ad hoc.
Ad-Hoc Clear Channel Select	Yes	No	No	Initiator of ad hoc session is automatically assigned to the clearest channel available.
Software Tools Applet (Launcher)	Yes	Yes	Yes	Easy access to key wireless LAN NIC information.
Signal Strength	Yes	Yes	Yes	Indicates strength of RF signal for troubleshooting purposes.
Firmware Upgrade	Yes	Yes	Yes	
Wireless Network Card Info	Yes	Yes	Yes	
Site Survey Utility	Yes	Yes	Yes	Assists in AP placement for optimal performance.
Dynamic Rate Shifting	Automatic	Automatic	Automatic	Automatically select the best transmit rate allowed by the distance between the NIC and AP.
Roaming	Yes	Yes	Yes	A notebook can roam among access points within the coverage area.
Short Preamble Support	Yes	Yes	No	Results in better throughput.
Static IP and DHCP Support	Yes	Yes	Yes	Works in networks with or without DHCP servers.
AP Discovery	Yes	No	No	Allows a network administrator to discover all Wi-Fi APs within range and their network properties including IP address.
AP Management Tool (runs on the client)	Yes	No	No	Allow a network administrator to discover and manage all APs on the network.
Auto-Network Connect	Yes	No	No	
Any Mode	Yes	No	No	Automatically connect the user to the nearest AP without having to know its ESSID.
Auto IP Renew	Yes	No	No	Validate and renew the client IP address automatically.
Task bar status	Yes	No	No	Can constantly monitor your network connection and card info.
Warranty	1 year	3 years	3 years	

Access Point Features

Load balancing	No	Yes	Yes	New clients associate to a different AP if too many users are on one AP.
Power over Ethernet	Yes	Yes	Yes	The AP can be powered over the Ethernet cable when used with the PowerBaseT.
Dynamic Rate Shifting	Yes	Yes	Yes	Throughput shifts from 11 to 5.5 to 2 to 1 Mbps to maintain connection even over long ranges and in noisy environments.
Rate Control	No	Yes	Yes	Rate Control options available in the AP to select Optional, Required or Not Used.
AP DHCP Support	Yes	Yes	Yes	The AP uses DHCP to obtain a leased IP address and network configuration information from a remote server

Access Point Features, *continued*

Access Point Features, *continued*	3Com® 11 Mbps Wireless LAN (Speed Racer 2.0)	3Com AirConnect® 11 Mbps Wireless LAN 2.0 (Trilogy 2.0)	3Com AirConnect 11 Mbps Wireless LAN 1.0/1.5 (Trilogy 1.0/1.5)	Benefits
AP DHCP Server	Yes	No	No	Even if there's no DHCP server on your network you can automatically assign IP addresses.
Device Filter/Access	No	Yes	Yes	The AP can keep a list of MAC addresses of the PC cards not allowed to associate with it.
Protocol Filters	No	Yes	Yes	Packet types supported for the type filtering function include the 16-bit DIX Ethernet types.
Roaming across routers				
Extended Roaming (via Mobile IP)	No	Yes	Yes	Keeps the same IP address as you move across routers so that any data or services from your home server will be forwarded to where you are.
Auto Network Connect	Yes	No	No	Automatically gives the client a new IP address when they move across routers. Keeps you connected to the network without having to manually configure IP addresses.
Clear Channel Select	Yes	No	No	AP will automatically scan spectrum and select clearest channel.
AP Configuration	HTTP (via client management tool)	Serial, Telnet, SNMP, HTTP, PPP	Serial, Telnet, SNMP, HTTP, PPP	Supports the listed standards for corporate network management.
Point-to-Point Bridge Mode	No	Yes	Yes	In WLAP mode, a wireless AP-to-AP connection functions as a bridge to connect two Ethernet networks.
Wireless Repeating Mode	No	Yes	Yes	As a repeater to extend coverage area without additional network cabling. Each wireless AP can have connections with up to four other wireless APs.
Simultaneous firmware upgrade	No	Yes	Yes	Upgrade firmware on multiple AP's simultaneously
Save and Load facility	Yes	No	No	Makes it easy to configure AP's on the network with the same setting.
Sixty Second Setup	Yes	No	No	Take Ethernet cable, plug into AP and your AP is up and running. Excludes security setup.
Number of recommended simultaneous users	65	63	63	Theoretically unlimited. Practically it is limited because it is a shared medium of 11 Mbps bandwidth. There is a hard limit of 256 users with Speed Racer if Dynamic Security Link is being used. Note: All competitor's products are also limited to the 11 Mbps shared bandwidth.
Range	330	330	300	
Warranty	1 year	3 years	3 years	

Security Features

Security Features				
40 Bit Key (Shared)	Yes	Yes	Yes	Basic security—Wi-Fi interoperable. Encryption key is fixed.
128 Bit key (Shared)	No	Yes	Yes	Extended security. Encryption key is fixed.
Dynamic Security Link (128-bit Session Key)	Yes	No	No	Virtually unbreakable security. Unique security key is generated for each client and each association. Supports up to 256 users per access point.
User Authentication (user name, password log on).	Yes	No	No	Network security—ensures that only authorized users can get onto the network.
Password Protection: AP Configuration	Yes	Yes	Yes	Prevents unauthorized users from configuring the AP.

Standards and Interoperability

Standards and Interoperability				
Wi-Fi certification	Yes	Yes	Yes	Ensures interoperability amongst other vendor's Wi-Fi certified products.
802.11b	Yes	Yes	Yes	Supports standard protocol.
Microsoft WHQL	No	Yes	Yes	Microsoft certification for driver (May not be available at initial product ship)

Part II—Differentiating feature summary

Designed for the small-to-medium enterprise market, the 3Com 11 Mbps Wireless LAN has many of the key features of the AirConnect solution. It also has a number of unique selling features which combine to make it our most simple, reliable and secure wireless LAN available. The 3Com 11 Mbps Wireless LAN should be sold throughout the enterprise market except in situations where the customer needs SNMP, or if they have already standardized on the AirConnect solution and do not wish to create a mixed environment. The following are some of the key differentiating features for both solutions:

3Com 11 Mbps Wireless LAN (Speed Racer)	AirConnect 11 Mbps Wireless LAN (version 1.5 and 2.0)
XJACK antenna on PC card	No
Auto Network connect	No
Dynamic Security Link	No
Clear Channel Select	No
60 Second Setup	No
No	SNMP, Telnet, PPP , serial support
No	Simultaneous AP firmware upgrade
No	Mobile IP (when cross routers info is forwarded)

The 3Com 11 Mbps Wireless LAN PC card is designed to be our "best of breed" wireless LAN PC card. This Wi-Fi certified card will work with all of our existing wireless LAN solutions—the AirConnect wireless LAN access point and the 3Com Home Wireless Gateway. It will be priced slightly higher than the AirConnect PC card on account of the additional features it offers:

• XJACK antenna

• Auto Network Connect

• Dynamic Security Link

• User authentication (network login)

The 3Com 11 Mbps Wireless LAN PC card should be sold in all target markets —large enterprise, small-to-medium enterprise, home and the public access space—unless for some reason the customer has a preference for the AirConnect card. This may be the case if they:

• Have already standardized on the AirConnect solution and want to avoid a mixed environment

• Require a slightly less-expensive card with no XJACK antenna

• Have standardized on AirConnect's 128-bit encryption

• Require support for Windows CE

Pricing (list)

3Com 11 Mbps Wireless LAN access point 6000	$699
AirConnect 11 Mbps Wireless LAN access point	$995
2Com 11 Mbps Wireless LAN PC card with XJACK antenna	$219
AirConnect 11 Mbps Wireless LAN PC card	$199

AirConnect 1.5 v. 2.0

Version 2.0 of AirConnect is designed to replace version 1.5. It contains the following improved features:

• Ad Hoc support for peer to peer networking without an access point

• An improved chipset for better throughput

• A robust fixed antenna design

Part III—Positioning statements

AirConnect 11 Mbps Wireless LAN

For large businesses that require SNMP and related network management tools.

3Com 11 Mbps Wireless LAN

For all businesses that want an easy-to-setup and use, highly secure, wireless network.

3Com Home Wireless Gateway

Wireless extension to your broadband modem for home and SOHO users.

AirConnect 11 Mbps wireless LAN (Code Name—Trilogy)

The 3Com AirConnect 11 Mbps wireless LAN solution is for large enterprises who wish to improve productivity by providing location-independent network access throughout their company. AirConnect provides these companies with network management tools and features like SNMP which allows administrators to use existing network management platforms to monitor a wide variety of network and wireless performance parameters. AirConnect also supports mobile IP allowing mobile users in large companies to roam across campus without losing their network connections.

3Com 11 Mbps wireless LAN (Code Name—Speed Racer)

The 3Com 11 Mbps wireless LAN solution is for small-to-medium sized companies that wish to improve productivity by providing a cost effective networking solution either as an extension to their existing LAN or as their LAN of choice. As the most simple, reliable and secure solution available, the 3Com 11 Mbps wireless LAN comes with a 60-second install, higher levels of security and our innovative XJACK antenna.

3Com Home Wireless Gateway (Code Name—Daffy)

The 3Com Home Wireless Gateway is ideal for laptop users who want untethered network access throughout their house and home-business users who wish to quickly and easily set up a network. It provides simple, yet full-featured Internet access and resource sharing for all your wired and wireless devices. Setup is simple with no drivers or software to install. Includes 3 wired Ethernet ports, a built-in firewall for protection and VPN support for easy access to the corporate network.

Part IV—Compatibility matrix across platforms

InfraStructure Mode	AirConnect 11 Mbps Wireless LAN access point 1.0 AP w/2.2 f/w upgrd	AirConnect 11 Mbps Wireless LAN access point 2.0 AP	3Com 11 Mbps Wireless LAN access point 6000 2.0 AP	3Com Home Wireless Gateway
AC 1.0 PC Card				
No Encryption	Yes	Yes, AP Short-preamble off	Yes	Yes
40 bit Encryption	Yes	Yes, AP Short-preamble off	Yes	Yes
128 bit Encryption	Yes	Yes, AP Short-preamble off	No	No
AC 2.0 PC Card				
No Encryption	Yes	Yes	Yes	Yes
40 bit Encryption	Yes	Yes	Yes	Yes
128 bit Encryption	Yes	Yes	No	No
SR 2.0 PC Card				
No Encryption	Yes	Yes	Yes	Yes
40 bit Encryption	Yes	Yes	Yes	Yes
128 bit Encryption	No	No	Yes	No
AC 1.5 PCI Card				
No Encryption	Yes	Yes	Yes	Yes
40 bit Encryption	Yes	Yes	Yes	Yes

Ad Hoc Mode

	AirConnect 11 Mbps Wireless LAN access point 1.0 AP w/2.2 f/w upgrd	AirConnect 11 Mbps Wireless LAN access point 2.0 AP	3Com 11 Mbps Wireless LAN access point 6000 2.0 AP	3Com Home Wireless Gateway
AC 1.0 PC Card w/2.2 f/w upgrd				
No Encryption	Yes, long preamble only	Yes, long preamble only	Yes	Yes
40 bit Encryption	Yes, long preamble only	Yes preamble only	Yes	Yes
128 bit Encryption	Yes, long preamble only	Yes, long preamble only	No	n/a
AC 2.0 PC Card				
No Encryption	Yes, long preamble only	Yes	Yes	Yes
40 bit Encryption	Yes, long preamble only	Yes	Yes	Yes
128 bit Encryption	Yes, long preamble only	Yes	No	n/a
SR 2.0 PC Card				
No Encryption	Yes	Yes	Yes	Yes
40 bit Encryption	Yes	Yes	Yes	Yes
128 bit Encryption	No	No	Yes	N/A
AC 1.5 PCI Card				
No Encryption	Yes	Yes	Yes	Yes
40 bit Encryption	Yes	Yes	Yes	Yes

Mixed Solutions, Limitations

Support for . . .	Auto Network Connect		Dynamic Security Link	Encryption	
	Any mode	Auto IP release/renew	128-bit session key	40-bit	128-bit shared key
Speed Racer access point and PC Card	Yes	Yes	Yes	Yes	No
Speed Racer access point and AirConnect PC Card	No	No	No	Yes	No
AirConnect Access Point and Speed Racer PC Card	Yes	No	No	Yes	No

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