

3Com® Wireless 11a/b/g PCI Adapter

DATA SHEET



- Provides universal, complete access to IEEE 802.11a, 802.11b, and 802.11g wireless networks.
- Helps ensure the PCI Adapter will interoperate with Wi-Fi compatible products from other vendors.
- Supports the latest, most effective authentication techniques to thwart intruders, and simplifies network management.

Key Benefits

Complete 802.11 Standards Support

Universal, high-speed wireless networking has just been made practical. The 3Com Wireless 11a/b/g PCI Adapter supports all three existing IEEE 802.11 networking standards—11a, 11b, and 11g—so users can connect to any Wi-Fi wireless network. All-in-one support preserves existing equipment investment and lets administrators mix and match radio bands to meet different coverage and bandwidth needs within the same area.

Secure

3Com® offers one of the most robust suites of standards-based security on the market today. To protect wireless data, the PCI adapter supports Wi-Fi Protected Access (WPA, WPA2) and 128-bit Advanced Encryption Standard (AES) encryption for higher level security, and Wireless Equivalent Privacy (WEP) 40/60/128/152-bit shared-key encryption. To protect against unauthorized network access, the PCI Adapter supports the MD5 algorithm, 802.1X authentication, and EAP-TLS, PEAP, and EAP-TTLS authentication protocols.

Multimedia Capable

WiFi Multimedia (WMM), based on the 802.11e standard, adds managed levels of Quality of Service (QoS) for data, voice, and video. WMM is critical for a new generation of delay-sensitive applications such as Voice over Wireless IP (VoWIP).

Performance and Reliability

Desktop users can access network resources, the Internet, and e-mail at speeds up to 54 Mbps or 108 Mbps in turbo mode*, ideal for multimedia applications. A host of features ensure reliable wireless connections and excellent speeds. Wi-Fi certification helps ensure interoperability with other vendors.

Easy to Set Up and Use

Setup and operation are extraordinarily easy, making the PCI adapter an intelligent choice for first-time wireless network users. Create profiles with specific wireless LAN settings for each wireless LAN network. Users just click the profile and they are configured for connection.

Features

	Description
COMPATIBILITY	
Multiple standards support	Provides universal, complete access to IEEE 802.11a, 802.11b, and 802.11g wireless networks.
Wi-Fi certification	Helps ensure the PCI Adapter will interoperate with Wi-Fi compatible products from other vendors.
SECURITY	
802.1X and WPA network access control	Supports the latest, most effective authentication techniques and EAP authentication to thwart intruders and simplify network management. WPA2 improves in WLAN security with tighter access control.
WPA, WPA2, AES, and WEP	Help keep wireless transmissions private. WPA and WPA2 128-bit encryption AES encryption are used in 802.11a and 802.11g networks, 128-bit WEP encryption in legacy networks.
PERFORMANCE AND RELIABILITY	
High Speed	Supports speeds up to 54 Mbps on 802.11g or 802.11a networks, with speeds up to 108 Mbps in turbo mode*.
Extended Range (XR)	Extends 802.11 operating range by increasing the receiver sensitivity.
WiFi Multimedia (WMM)	Adds managed QoS levels for data, voice, and video. WMM is critical for a new generation of delay-sensitive applications. Based on the 802.11e standard.
Dynamic rate shifting	Automatically matches the best connection speed in response to changing traffic and environmental conditions.
EASE OF USE	
3Com Wireless Utility	Creates profiles for each wireless network's specific settings—just click the proper profile to match the desired wireless network. Also displays connection status and features simple-to-use diagnostic tools.

* 108 Mbps turbo mode requires a 3Com wireless LAN access point that supports turbo mode. Turbo mode is not available for use in the United Kingdom. See www.3com.com for compatible Access Points.

Specifications

Standards Conformance

WiFi WMM
 WPA, WPA2
 IEEE 802.11e
 IEEE 802.1X
 IEEE 802.3
 IEEE 802.3u
 Wi-Fi certified
 IEEE 802.11a
 IEEE 802.11b
 IEEE 802.11g

System Requirements

PC with an available PCI Adapter slot
 PC must be running Windows XP/2000

Computer Slot Type

PCI Adapter (3.3V)

Drivers/Supported Operating Systems

Windows 2000, Windows XP

Receive Sensitivity

802.11a
 54 Mbps: -70 dBm
 48 Mbps: -71 dBm
 36 Mbps: -76 dBm
 24 Mbps: -79 dBm
 18 Mbps: -83 dBm
 12 Mbps: -85 dBm
 9 Mbps: -86 dBm
 6 Mbps: -87 dBm
802.11g
 54 Mbps: -70 dBm
 48 Mbps: -71 dBm
 36 Mbps: -75 dBm
 24 Mbps: -79 dBm

18 Mbps: -82 dBm
 12 Mbps: -84 dBm
 9 Mbps: -86 dBm
 6 Mbps: -87 dBm
802.11b
 11 Mbps: -86 dBm
 5.5 Mbps: -88 dBm
 2 Mbps: -91 dBm
 1 Mbps: -93 dBm

Installation, Configuration and Management

3Com Wireless Utility
 Pre-set defaults

LED Indicators

Activity

Dimensions

Height: 12 cm (4.7 in)
 Width: 6.5 cm (2.5 in)
 Depth: 0.5 cm (0.2 in)

Operating Voltage

3.0V – 3.6V

Data Rates Supported

802.11a/g: 108, 54, 48, 36, 24, 18, 12, 9 & 6 Mbps
 802.11b: 11, 5.5, 2 & 1 Mbps

Frequency Band

USA/Canada: 2412MHz - 2462MHz & 5150 - 5350MHz, 5725 - 5850MHz.
 Both 2.4GHz and 5GHz support Turbo mode.
 EU: 2400 - 2483.5MHz (France: 2400 - 2454MHz) & 5150 - 5350MHz, 5470 - 5725MHz. 11g supports Turbo mode (up to 108Mbps).

Modulation Technique

802.11a: OFDM (Orthogonal Frequency Division Multiplexing)
 802.11b: DSSS (Direct Sequence Spread Spectrum)
 802.11g: OFDM and DSSS

Media Access Protocol

CSMA/CA

Security

WEP Open - 64 and 128 Bit Encryption
 WEP Shared - 64 and 128 Bit Encryption
 WPA-PSK - TKIP or AES
 WPA - TLS, PEAP, TTLS, LEAP
 802.1X - TLS, PEAP, TTLS, LEAP
 WPA2-PSK - TKIP, AES
 WPA2 - TLS, PEAP, TTLS, LEAP, TKIP, AES

Environmental Range

Operating temperature:
 0° to 50°C (32° to 122°F)

Regulatory/Agency Approvals

Safety: UL/CSA 60950-1, EN/IEC 60950-1
 Radio: FCC Part 15.247 & 15.407, RSS-210, EN 300 328 V1.6.1, draft EN 301 893 V 1.2.3
 EMC: FCC Part 15 Subpart B, EN 301 489-17
 SAR: FCC Guideline for Human Exposure IEEE C95.1, EN50392

Package Contents

PCI Adapter
 External antenna
 Low profile PCI bracket
 CD-ROM containing PCI Adapter drivers, installation and diagnostics software, and installation instructions

Warranty

3-year hardware warranty. For more information, refer to 3Com.com

Ordering Information

PRODUCT DESCRIPTION	REGION	3COM SKU
3Com® Wireless 11a/b/g PCI Adapter SL-3055	North America, South America & Europe, Asia and the Pacific Rim	3CRDAG675B
<i>The 3Com 11a/b/g Wireless PCI Adapter can be used with these 3Com products:</i>		
3Com® Wireless Access Point 8250		3CRWE825075A
3Com® Wireless Access Point 8750		3CRWE875075A
3Com® Wireless Access Point 7250		3CRWE725075A
3Com® 11a/b/g Wireless LAN Workgroup Bridge		3CRWE675075
3Com® OfficeConnect® Wireless 108Mbps 11g PoE Access Point		3CRGPOE10075
3Com® OfficeConnect® Wireless 11g Access Point		3CRWE454G72
3Com® OfficeConnect® Wireless 11a/b/g Access Point		3CRWE454A72/ 3CRWE454A72U
3Com® OfficeConnect® Wireless 54 Mbps 11g Print Server		3CRGPOE10075

NOTE: In addition, the PCI Adapter can be used with any 3Com WLAN switch or 3Com OfficeConnect® 802.11a, 802.11b, or 802.11g products not listed here. Check out www.3com.com for a listing of all of 3Com wireless products.



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