

Unified architecture delivers integrated management of the wired and wireless network, with 24 ports of Layer 2 Gigabit PoE switching and control of up to 24 access points

OVERVIEW

The 3Com® Unified Gigabit Wireless PoE Switch 24 is the industry's first truly integrated and cost-effective Layer 2 Gigabit Power over Ethernet (PoE) switch that provides centralized management of both the wired and wireless network. This unified switch offers the small-to-medium-sized business market with 20 to 250 users a one-box solution for the integration of wired, wireless, PoE and convergence applications.

KEY BENEFITS

OFFERS COST-EFFECTIVE LAYER 2 SWITCHING FOR BOTH WIRED AND WIRELESS NETWORKING

No need to add specialized wireless switches or controllers—at extra cost—to the network, as the Unified Gigabit Wireless PoE Switch 24 controls both types of networks, autosensing the PoE power requirements of the device connected to the port.

DELIVERS GIGABIT SPEEDS

For top performance, this unified switch delivers 24 ports of wirespeed Gigabit throughput.

CENTRALIZES MANAGEMENT OF WIRED AND WIRELESS IN ONE PLATFORM

The entire wired and wireless network can be managed through a single web management interface, with support for automatic discovery and configuration of access points (APs).

POWER OVER ETHERNET

The 3Com Unified Gigabit Wireless PoE Switch 24 provides inline power to attached devices—access points, Voice over IP (VoIP) phones, IP security cameras, etc.—via industry-standard IEEE 802.3af Power over Ethernet over a single Ethernet cable, resulting in significant deployment cost savings.

PROVIDES FLEXIBLE WIRED AND WIRELESS SUPPORT

The unified switch ships standard with full support for PoE and wireless access points on all 24 ports. There are no licensing fees or port fees ever required to utilize the full functionality.



3Com Unified Gigabit Wireless PoE Switch 24

KEY BENEFITS (CONTINUED)

SECURE THE NETWORK WITH ADVANCED, STANDARDS-BASED PROTECTION

The unified switch provides enhanced security features to ensure your data is protected, wired and wirelessly. Support for WEP, WPA and WPA2 AES encryption helps guarantee the privacy of your wireless network data. IEEE 802.1X authentication provides secure wired and wireless network logins.

PRIORITIZE VOICE TRAFFIC AUTOMATICALLY

Voice traffic from 3Com and other IP telephony systems can be automatically assigned to a voice-dedicated VLAN, helping to optimize this delay-sensitive traffic. Support for Wi-Fi Multimedia (WMM) assures quality of service for wireless VoIP traffic.

EFFORTLESSLY ROAM BETWEEN ACCESS POINTS

The unified switch architecture brings AP configurations and support directly into the switch, allowing users to move between access points, centrally managed by the switch with seamless mobility and no loss of connectivity. Wireless devices retain their VLAN membership and IP address, providing uninterrupted communication.

FEATURES

UNIFIED ARCHITECTURE

Central management interface› Single IP and web GUI management and configuration for all wired Ethernet devices and wireless access points and users.

Managed access point control› Centrally maintained access point settings eliminate the need to individually configure each device's SSIDs, VLANs, access control lists and security settings.

PoE on every port› Full 15.4 watts of 802.3af compliant power on every port assures that every connection can provision every type of Ethernet standard device—3Com IntelliJack® switch, cameras, access points, VoIP phones and more.

10/100/1000 auto-detect ports› Switch design supports legacy Ethernet alongside newer gigabit Ethernet devices.

VoWiFi ready› Provides ability for voice over WLAN using real-time peer-to-peer communications over IEEE 802.11 infrastructure for cost savings.

Reduced total cost of ownership (TCO)› Integration of wired Layer 2 switching, wireless access points, and PoE support provide single go-to point for network deployment and troubleshooting.

CENTRALIZED WIRELESS AND RF MANAGEMENT

Centralized wireless policy› The 3Com Unified Switch supports up to 24 access points deployed using same or different policies (security, VLAN, QoS) for employees and guest visitors.

Automatic discovery› Automatic discovery and configuration of supported access points minimizes the installation time and configuration of the wireless network.

Fast roaming› Quick handoff of user information and authorizations enables seamless roaming with session integrity and mobility robust enough to support voice traffic.

Load balancing› System adjusts user-to-AP ratio to maximize WLAN user throughput and performance.

FEATURES (CONTINUED)

SECURITY

IEEE 802.1X authentication› Centralized authentication control and management of all network users helps ensure that only authorized users access the network.

Enterprise-class encryption› WiFi CERTIFIED radios using WPA and WPA2, AES, TKIP and WEP encryption help protect and secure all wireless communications.

Rogue AP detection and mitigation (IDS)› 802.11 radio frequency (RF) scans identify unauthorized access points; the Unified Switch can then take mitigation actions.

Hierarchical and secure management› Delivers tiered management access to the unified switch via HTTPS, HTTP, Telnet CLI, SSH CLI and SNMP v1, 2c and 3.

Extensive VLAN and ACL capabilities› Provides scalable security and network design, while maintaining strict security and access control throughout the network.

LAYER 2 SWITCHING FOR WIRED AND WIRELESS NETWORKING

Device autosensing› The Unified Gigabit Wireless PoE Switch 24 autosenses the device—wired or wireless—connected to the port.

Gigabit speed› This Unified Switch delivers non-blocking 10/100/1000 wirespeed Gigabit throughput to handle bandwidth-hungry and speed-sensitive applications.

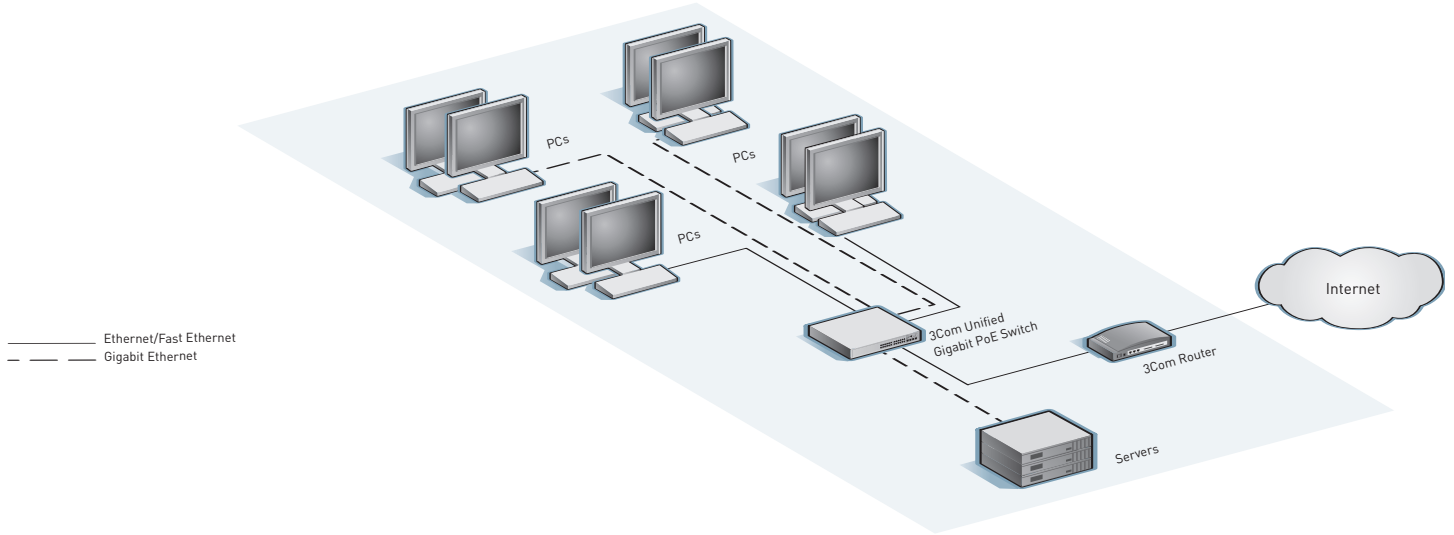
Traffic prioritization› IEEE 802.1p Class of Service (CoS) and automatic assignment of VoIP traffic to dedicated VLANs help ensure that critical time-sensitive traffic gets the priority needed for quality communications.

Centralized management› The entire wired and wireless network can be managed through a single IP address and management interface.

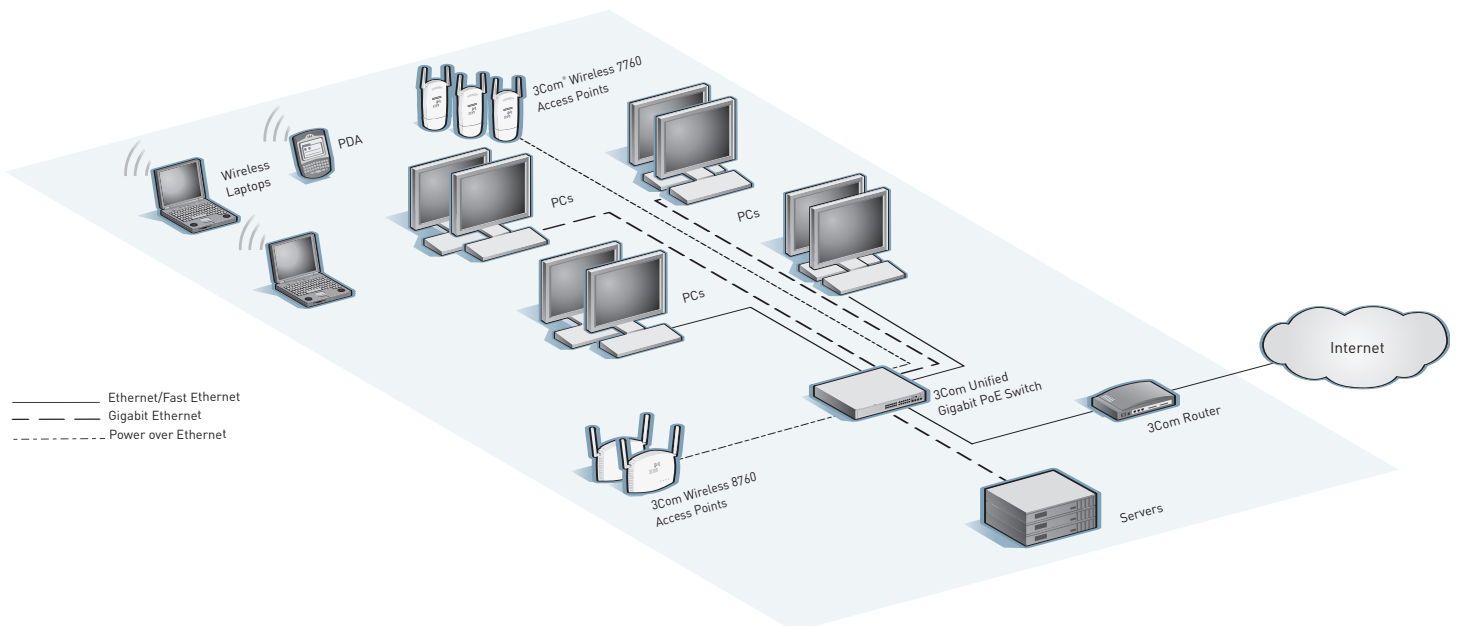
FEATURES SUMMARY

Feature	Supported Functionality
LAN switching	Layer 2
Ethernet ports	24 ports 10/100/1000, auto-negotiate, auto-MDIX
Performance	Line-rate 48 Gbps; full-rate Gigabit Ethernet forwarding on all ports
Management	Single IP Web GUI and Telnet interface
Wireless switching	Embedded centralized wireless controller
Access points	Up to 24 802.11a/b/g single or dual radios
Power over Ethernet	Full 24 ports of 15.4 watts 802.3af PoE
Authentication	IEEE 802.1x RADIUS and local MAC
RF management	RF rogue detection and load balancing

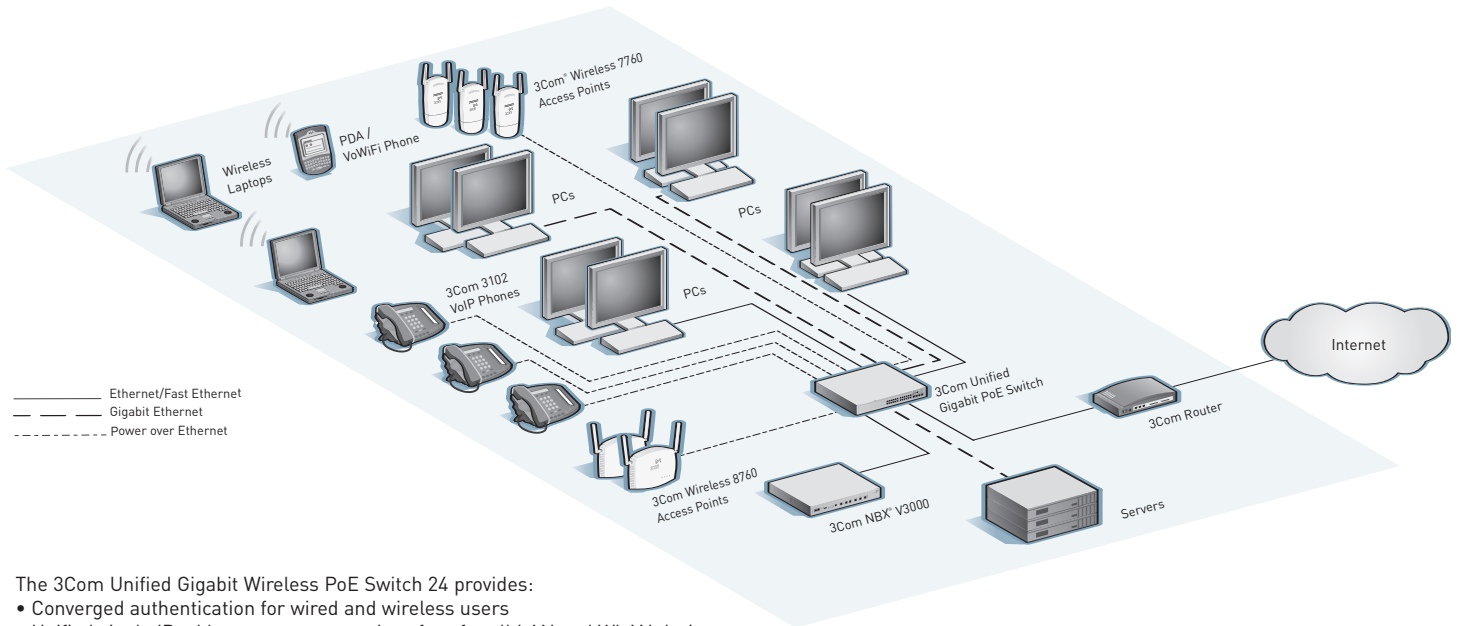
USE THE 3COM UNIFIED SWITCH AS THE STARTING POINT FOR A HIGH-PERFORMANCE WIRED LAYER 2 GIGABIT VOICE READY NETWORK



3COM WIRELESS ACCESS POINTS, POWERED BY POE, PROVIDE WIRELESS CONNECTIVITY



ADDING IP TELEPHONY COMPLETES THE CONVERGED NETWORK



The 3Com Unified Gigabit Wireless PoE Switch 24 provides:

- Converged authentication for wired and wireless users
- Unified single IP address management interface for all LAN and WLAN devices
- Centralized access point configuration and coordination
- Centrally managed PoE source for access points, IP phones and 802.3af devices
- Investment protection—deploy Ethernet now and be ready for later implementation of Gigabit, wireless mobility, PoE and VoIP

VOICE READY NETWORK

3Com Voice Ready Networks provide an innovative and holistic approach to assessing, recommending and implementing a converged network, solving the most vexing challenges that confront IT managers as they deploy Internet Protocol (IP) telephony systems. With 3Com Voice Ready Networks, organizations can optimize network infrastructure for realtime voice and video traffic, ensure secure communications and protect business assets.

The Unified Gigabit Wireless PoE Switch 24 is an integral component of this approach, offering:

- › Automatic assignment of voice traffic to separate VLANs
- › IEEE 802.1p prioritization and 802.1Q VLANs
- › Centralized IEEE 802.11 AP management
- › WPA/WPA2 and WEP wireless security
- › IEEE 802.1X authentication
- › Four dual-personality Gigabit SFP ports
- › Seamless AP-to-AP wireless roaming
- › 3Com Wireless 7760 11a/b/g PoE Access Point support
- › 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point support

THE WIRELESS SOLUTION FOR SMALL-TO-MEDIUM-SIZED BUSINESSES



from left: 3Com Unified Gigabit Wireless PoE Switch 24, Wireless 7760 11a/b/g PoE Access Point and Wireless 8760 Dual-Radio 11a/b/g PoE Access Point

The 3Com Unified Gigabit Wireless PoE Switch 24 supports the single-radio 3Com Wireless 7760 11a/b/g PoE Access Point (3CRWE776075) and the dual-radio 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point (3CRWE876075) operating in “fit” or “managed” mode operation.

These access points can be initially installed as stand-alone “fat” devices in those networks where wireless connectivity is required but centralized management is not. With the later addition of the 3Com Unified Switch, these two access points can be easily reconfigured to operate in fit mode and being centrally managed by the Unified Switch.

3Com Wireless 7760 11a/b/g PoE Access Point

This access point is an attractive solution for cost-effectively and securely extending mobile access to wired network resources or creating full-featured networks in small and medium businesses, remote sites, or temporary locations. The user-configurable dual-band radio of the Wireless 7760 11a/b/g PoE Access Point provides IEEE 802.11a or 802.11b/g connections.

3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point

The 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point is a cost-effective dual-band, wireless solution for enterprises of all sizes. This access point functions simultaneously with an IEEE 802.11b/g and an IEEE 802.11a radio.

SPECIFICATIONS

CONNECTORS

24 total available ports, comprised of:
20 auto-negotiating 10BASE-T/
100BASE-TX/1000BASE-T ports
configured as auto MDI/MDIX
4 dual-personality Gigabit port pairs,
configurable as 10BASE-T/100BASE-TX/
1000BASE-T or SFP

PERFORMANCE

48 Gbps, max.
Wirespeed performance across ports

LAYER 2 SWITCHING

8,196 MAC addresses in address table
256 port-based VLANs (IEEE 802.1Q);
max.
IEEE 802.3ad Link Aggregation, Link
Aggregation Control Protocol (LACP)
Auto-negotiation of port speed and
duplex
IEEE 802.3x full-duplex flow control
IEEE 802.1D Spanning Tree Protocol
(STP)
IEEE 802.1w Rapid Spanning Tree
Protocol (RSTP)
IEEE 802.1s Multiple Spanning Tree
Protocol (MSTP)
Internet Group Management Protocol
(IGMP) snooping on Layer 1 and 2
interfaces

CONVERGENCE

4 hardware queues per port
IEEE 802.1p Class of Service/Quality
of Service (CoS/QoS)
Wi-Fi Multimedia (WMM)
256 Access Control Lists (ACLs)
4 BSSIDs per radio
Diffserv Codepoint (DSCP)

SECURITY

Rogue AP detection and mitigation
IEEE 802.1X network login user
authentication
EAP over LAN (EAPoL) transport with
PEAP and EAP-TLS authentication
RADIUS server authentication
(RFC 2618)
Local MAC authentication
Automatic VLAN assignment via
RADIUS server
IEEE 802.1X user authentication of
switch management on switch Telnet
and console sessions; multiple access
privilege levels
Hierarchical management and password
protection for management interface

WIRELESS ENCRYPTION

WPA Personal and Enterprise
WPA 2 Personal and Enterprise
AES (CCMP): 128-bit (FIPS-197)
WEP 40/64- and 104/128-bit
TKIP: RC4 40-bit
SSL and TLS: RC4 128-bit and RSA
1024- and 2048-bit
EAP-TLS, EAP-TTLS/MSCHAPv2,
PEAPv0/EAP-MSCHAPv2, EAP-SIM

POWER OVER ETHERNET

IEEE 802.3af
15.4W per port, max.

ACCESS POINT SUPPORT

Ships with support for up to 24 of the
below access points:

- 3Com Wireless 7760 11a/b/g PoE
Access Point (3CRWE776075)
- 3Com Wireless 8760 Dual-Radio
11a/b/g PoE Access Point
(3CRWE876075)

Max. 30 users per AP radio;
250 wireless clients max. per switch

ROAMING SUPPORT

Inter-AP roaming
Fast roaming
Dynamic load balancing

MANAGEMENT

Embedded GUI web management
interface
CLI via console or Telnet
System configuration with SNMP v1,
2c and 3 encryption
SSH v2 encryption
Configuration file for backup and
restore; dual configuration files
available
Dual firmware images
Remote Monitoring (RMON) groups:
statistics, history, alarm and events
Port mirroring/monitoring
System upgrade via HTTP and
TFTP (RFC1350)
Syslog
SNTP

RADIO RESOURCE MANAGEMENT

Automatic channel assignment
Dynamic load balancing
Bandwidth management (WMM)

DIMENSIONS

Height: 4.4 cm (1.7 in or 1 RU)
Width: 44.0 cm (17.3 in)
Depth: 41.5 cm (16.3 in)
Weight: 5.9 kg (13.0 lb)

POWER SUPPLY

Input voltage: 100-240 VAC, 50/60 Hz
Current rating: 8A, max.
Power consumption: 465W, max.
Power dissipation: 207 BTU/hr, max.

ENVIRONMENTAL REQUIREMENTS

Operating temperature: 0° to 40°C
(32° to 104°F)
Storage temperature: -40° to 70°C
(-40° to 158°F)
Humidity (operating and storage):
10% to 95% non-condensing
Standard: EN 60068 (IEC 68)

RELIABILITY

MTBF: 36 years (315,000 hours)

LED INDICATORS

Port speed or PoE status, SFP module
presence, fan, system

IEEE STANDARDS SUPPORTED

IEEE 802.1d Spanning Tree
IEEE 802.1p Priority Tags
IEEE 802.1Q VLANs
IEEE 802.1s Multiple Spanning Tree
IEEE 802.1X RADIUS
IEEE 802.1w Rapid Spanning Tree
IEEE 802.3 Ethernet
IEEE 802.3ab Gigabit Ethernet
IEEE 802.3ac VLAN tag
IEEE 802.3ad Link Aggregation
IEEE 802.3af Power over Ethernet
IEEE 802.3u Fast Ethernet
IEEE 802.3x Flow Control
IEEE 802.3z Gigabit Ethernet
IEEE 802.11a 54 Mbps, 5 GHz
IEEE 802.11b 5.5 and 11 Mbps,
2.4 GHz
IEEE 802.11d International roaming
extensions
IEEE 802.11g 54 Mbps, 2.4 GHz
IEEE 802.11h Spectrum managed 802.11a
IEEE 802.11i Enhanced security

EMISSIONS / AGENCY APPROVALS

EN 55022 Class A
FCC Part 15 Subpart B Class A
VCCI Class A
CISPR 22 Class A
EN 61000-3-2
EN 61000-3-3

IMMUNITY

EN 55024
EN 60601-1-2

SAFETY AGENCY CERTIFICATIONS

UL 60950-1
EN 60950-1
CSA 2.22 # 60950-1
IEC 60950-1
EU RoHS Compliant

PACKAGE CONTENTS

Switch unit, power cord, self-adhesive
rubber pads, rack-mount kit, Quick
Start Guide, warranty flyer

SYSTEM PREREQUISITES

Windows PC with Internet Explorer
version 6.0 or greater required for GUI
web management
DHCP server

WARRANTY AND OTHER SERVICES

Three-year Hardware Warranty,
including fans and power supply
Limited Software Warranty for 90 days
Advance Hardware Replacement
with Next Business Day shipment in
most regions
90 days of telephone technical support
Refer to www.3com.com/warranty
for details.

ORDERING INFORMATION

PRODUCT DESCRIPTION	3COM SKU
3Com Unified Gigabit Wireless PoE Switch 24	3CRUS2475
Transceivers	
3Com 1000BASE-SX SFP	3CSFP91
3Com 1000BASE-LX SFP	3CSFP92
Supported Access Points	
3Com Wireless 7760 11a/b/g PoE Access Point	3CRWE776075
3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point	3CRWE876075
Related Products: Wireless Clients	
3Com Wireless 11a/b/g PC Card with XJACK® (108 Mbps)	3CRPAG175B
3Com OfficeConnect® Wireless 108 Mbps 11g XJACK® PC Card	3CRXJK10075
3Com OfficeConnect Wireless 54 Mbps 11g PC Card	3CRGPC10075
3Com OfficeConnect Wireless 108 Mbps 11g USB Adapter (Swivel Base)	3CRUSB20075
3Com OfficeConnect Wireless 54 Mbps 11g Compact USB Adapter	3CRUSB10075
3Com Wireless 11a/b/g LAN PCI Card (108 Mbps)	3CRDAG675B
Related Products: IntelliJack Switches	
3Com IntelliJack Switch NJ225	3CNJ225
3Com IntelliJack Switch NJ220 (black)	3CNJ220-BLK
(cream)	3CNJ220-CRM
3Com IntelliJack Switch NJ105	3CNJ105
3Com IntelliJack Switch NJ100	3CNJ100
Related Products: IP Telephones[‡]	
3Com 3100 Entry Phone	3C10399A
3Com 3101 Basic Phone	3C10401A
3Com 3101 Basic Phone with Speaker	3C10401SPKRA
3Com 3102 Business Phone	3C10402A
3Com 3103 Manager Phone	3C10403A
3Com 3105 Attendant Console	3C10405A
3Com 3106 Cordless Phone	3C10406A
3Com 3107 Cordless Phone	3C10407A
3Com 3108 Wireless Phone	3C10408A
3Com Global Services	
3Com Wireless LAN Site Survey, Network Health Check, Installation Services and Express SM Maintenance	www.3com.com/services_quote
3Com University Courses	www.3com.com/3comu

[‡] 3Com NBX platform or 3Com VCX system required for phone operation

Visit www.3com.com for more information about 3Com secure converged network solutions.

3Com Corporation, Corporate Headquarters, 350 Campus Drive, Marlborough, MA 01752-3064
3Com is publicly traded on NASDAQ under the symbol COMS.

Copyright © 2007 3Com Corporation. All rights reserved. 3Com, the 3Com logo, IntelliJack, NBX, XJACK, and OfficeConnect are registered trademarks, and Express is a service mark, of 3Com Corporation. All other company and product names may be trademarks of their respective companies. While every effort is made to ensure the information given is accurate, 3Com does not accept liability for any errors or mistakes which may arise. All specifications are subject to change without notice.

401001-004 01/07

