

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.

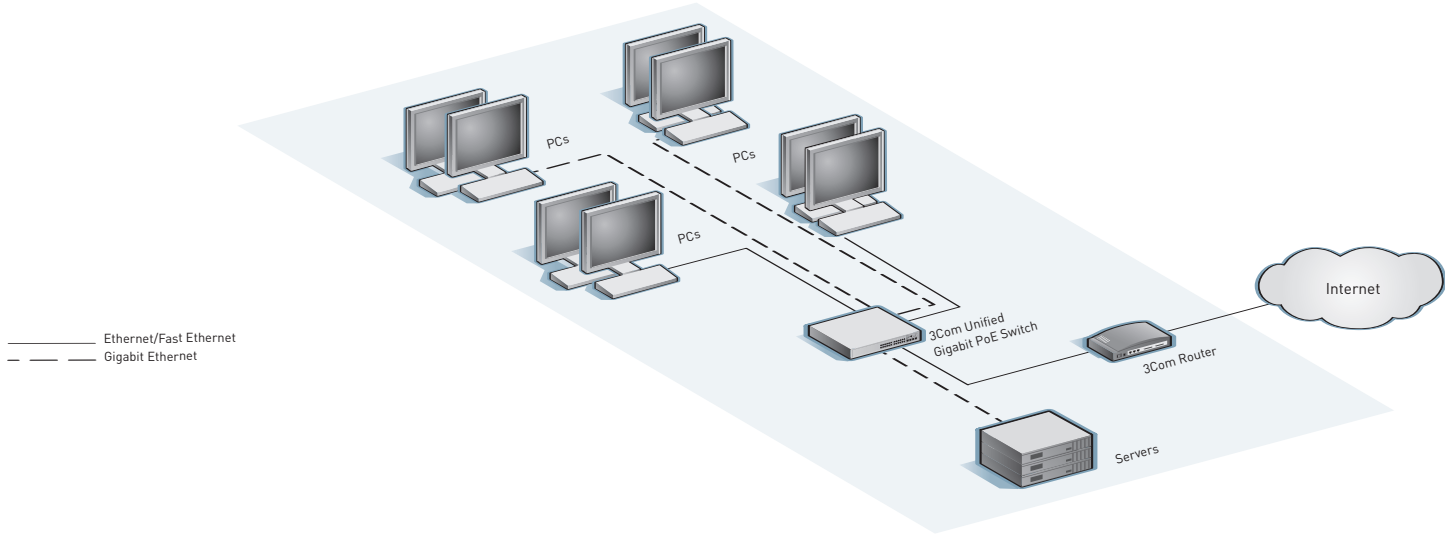
Traffic prioritization› IEEE 802.1p Class of Service (CoS) and automatic assignment of VoIP traffic to dedicated VLANs help ensure that critical time-sensitive traffic gets the priority needed for quality communications.

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

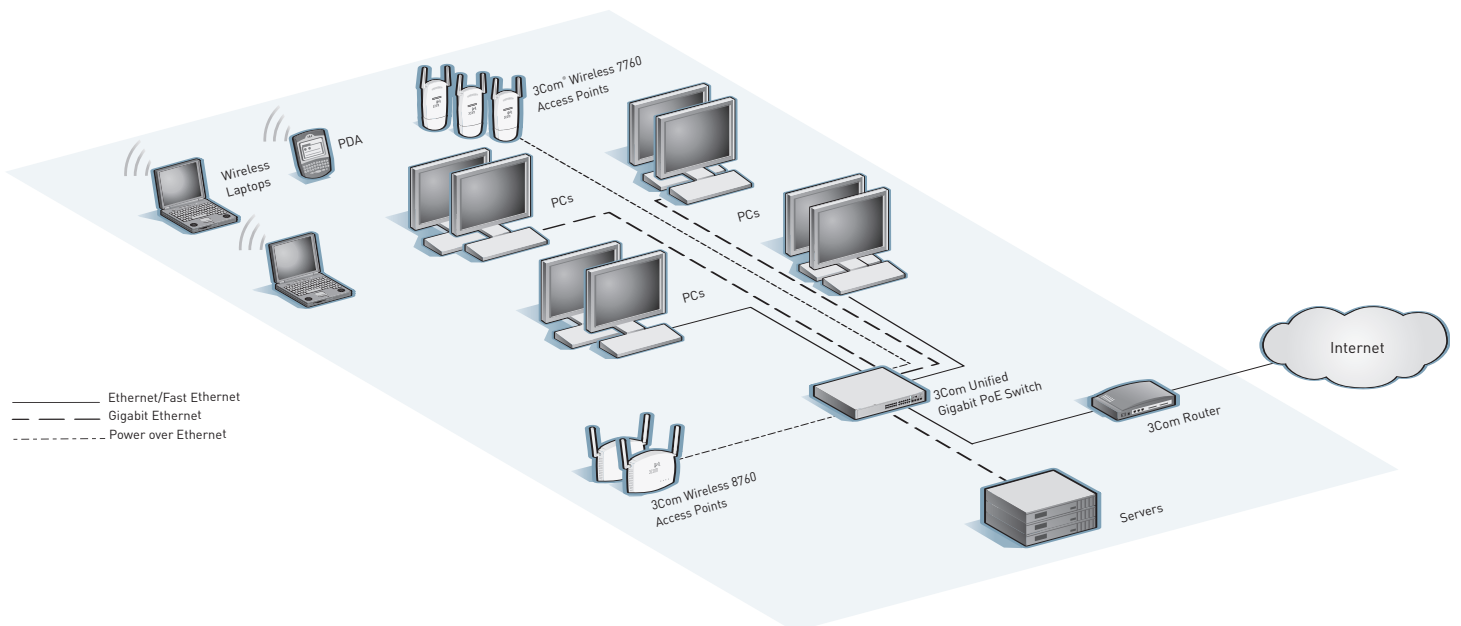
FEATURES SUMMARY

| Feature | Supported Functionality |
|---------------------|---|
| LAN switching | Layer 2 |
| Ethernet ports | 24 ports 10/100/1000, auto-negotiate, auto-MDIX |
| Performance | Line-rate 25.8 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 |

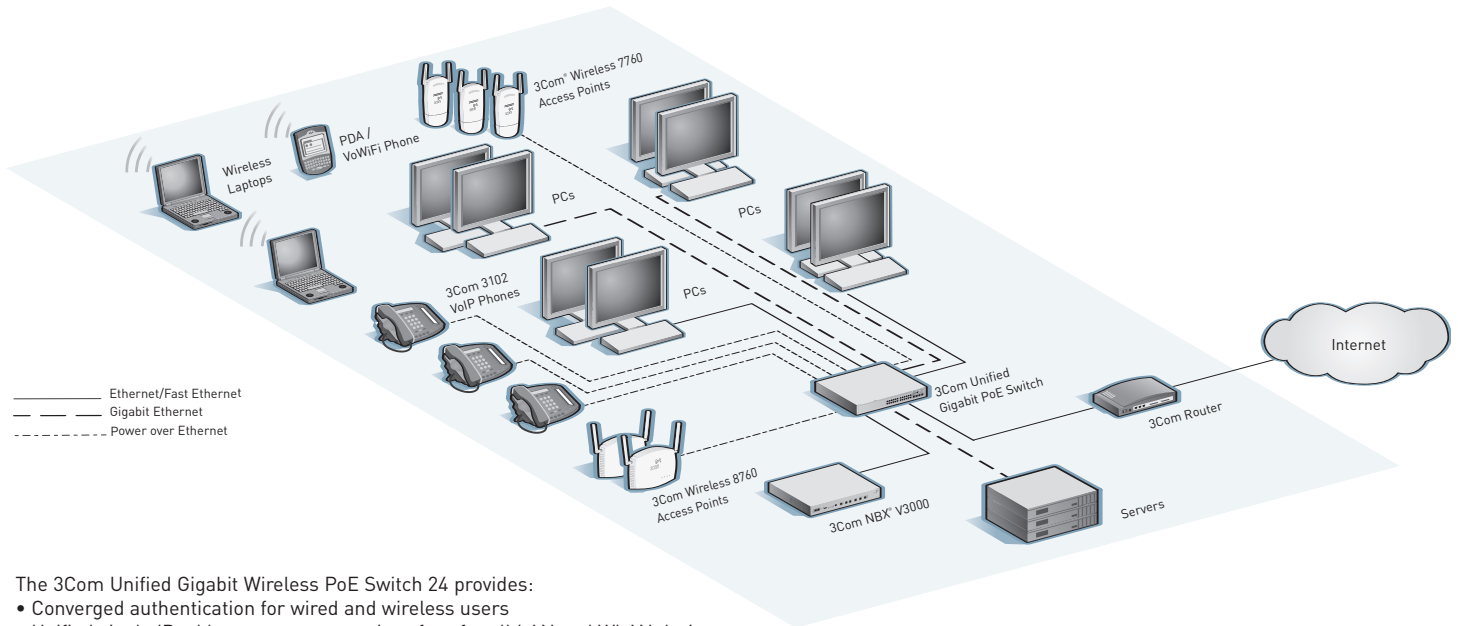
USE THE 3COM UNIFIED SWITCH AS THE STARTING POINT FOR A HIGH-PERFORMANCE WIRED LAYER 2 GIGABIT VOICE READY NETWORK



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

25.8 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.

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