Secure, reliable 108 Mbps PoE wireless connectivity in a cost-effective access point with advanced enterprise-class features and dual radios

OVERVIEW

The 3Com® Wireless 8760 Dual-Radio 11a/b/g PoE Access Point is a Power over Ethernet (PoE) wireless solution for enterprises of all sizes.

This fully-featured dual-radio access point functions simultaneously with an IEEE 802.11b/g and an IEEE 802.11a radio and provides ultra-fast speeds of up to 108 Mbps. Advanced security features such as Wi-Fi Protected Access (WPA/ WPA2), Wired Equivalent Privacy (WEP) and Open System are included. This access point also provides multiple SSID support and VPN passthrough along with VLAN support.

KEY BENEFITS

ENABLING WIRELESS FREEDOM

Take advantage of the freedom of high-speed networking without wires with the Wi-Fi CERTIFIED 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point. Wireless LANs (WLANS) are 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. Each access point (AP) supports up to 64 wireless users per radio for a total of 128 users, leaving plenty of room for growth.

PROVIDES PoE DEPLOYMENT FLEXIBILITY

PoE support makes it easier than ever to overcome installation problems by eliminating the need for an AC power plug at each AP. The 3Com Baseline Switch 2426-PWR Plus or the Switch 4400/4500/5500 PWR or other IEEE 802.3af-compliant PoE products supply both power and data to the access points through Category 5 or 6 Ethernet cable, providing flexible installation options in hard-to-wire locations. For convenience a PoE adapter is supplied with the unit.

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

KEY BENEFITS
(CONTINUED)

SECURES AND PROTECTS WIRELESS COMMUNICATIONS

This new access point delivers enterprise-class security to businesses of all sizes. To shield wireless communications at the source, WPA and WPA2 encryption provide the latest, toughest standards-based security; WEP encryption is also supported. For additional protection, the access point supports IEEE 802.1X and MAC address access control, authentication and authorization through backend RADIUS servers.

PROVIDES FLEXIBLE SECURITY AND ACCESS CONTROL

Configure and store up to four SSIDs with different security profiles for groups of users. IEEE 802.1Q-compliant VLAN support works with the multiple SSID feature to control access to network resources and segment user traffic.

SOLVES COMPLEX CONNECTIVITY PROBLEMS

The Wireless Distribution System bridging feature solves complex wireless connectivity problems. The access point supports both point-to-point and point-to-multipoint WDS links as well as repeater mode for flexible network deployment.

OFFERS INVESTMENT PROTECTION

No reason to replace APs as the network grows. Unique 3Com stand-alone-to-managed conversion method allows the 3Com 8760 AP to be used in stand-alone mode, or easily converted to be managed by the 3Com Gigabit Unified Wireless PoE Switch and 3Com WX-series wireless controllers and switch.

DELIVERS ENTERPRISE-CLASS FEATURES

3Com delivers superior business value by offering enterprise-class solutions without the complexity. 3Com also backs each product with global sales, service and support along with technology, financial and operational strength.

FEATURES AND BENEFITS

FLEXIBLE HIGH-SPEED CONNECTIVITY

Dual-radio support	Supports and offers 802.11a and 802.11b/g radios.
High-speed access	802.11a and 802.11b/g standard supports speeds up to 108 Mbps.
Wi-Fi a/b/g CERTIFIED	Helps ensure interoperability with Wi-Fi CERTIFIED products from other vendors.

ROBUST SECURITY FEATURES

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Encryption: WPA/WPA2, AES, TKIP and WEP	Toughest industry-standard algorithms help keep wireless transmissions private.
Multiple security profiles	Store up to eight different security settings; up to four security profiles per radio.
Multiple SSID support with SSID isolation	SSIDs can be bridged together or isolated.
Access control	Screens device MAC addresses to ensure that only trusted clients gain access to the WLAN.
802.1Q VLAN support	Groups users according to data or traffic requirements to segment traffic flow based on business priorities.
RADIUS server MAC-based and 802.1X AAA support	Centralizes wireless security through existing network RADIUS servers.

FEATURES AND BENEFITS (CONTINUED)

INSTALLATION AND MANAGEMENT CONVENIENCE

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WDS bridge and repeater configuration	Multiple APs can function as bridges supporting point-to-point or multi-point modes; repeater mode extends wireless coverage.
PoE support	Expands installation options by eliminating the need for power adapters and AC outlets for APs.
Access Point Discovery program	Automatically discovers AP devices to simplify configuration and management (PCs with Windows based operating systems only).
SNMP support	Enables the AP to be centrally managed by popular standards-based network management applications such as SNMP v1, v2c and v3.
Syslog support	Enables the AP to be centrally monitored by sending data to the network Syslog server.
Web browser-based administration	Familiar browser interface lets you configure and manage APs from anywhere on the network.
Investment protection	Use the AP as a stand alone unit, convert to managed functionality for use with the 3Com Unified Wireless Switch, and then when needed, convert to support 3Com WX-series wireless controllers and switch.

PoE Support

Choose from several power options to match your installation needs. First, the PoE access point can be powered with the supplied PoE injector.
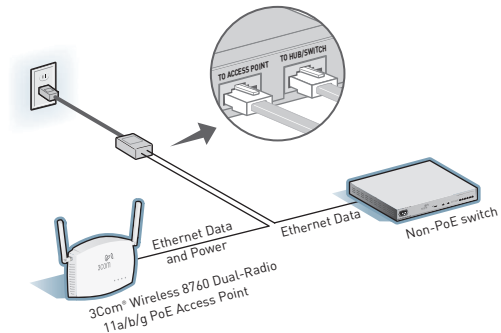
The access point can also be powered using an 802.3af-compliant PoE switch. The switch provides both data and power through the Ethernet cable.
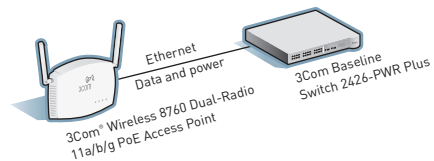
The Midspan solution distributes power to the PoE access point over existing switch connections, seamlessly extending network connectivity into hard-to-wire locations.
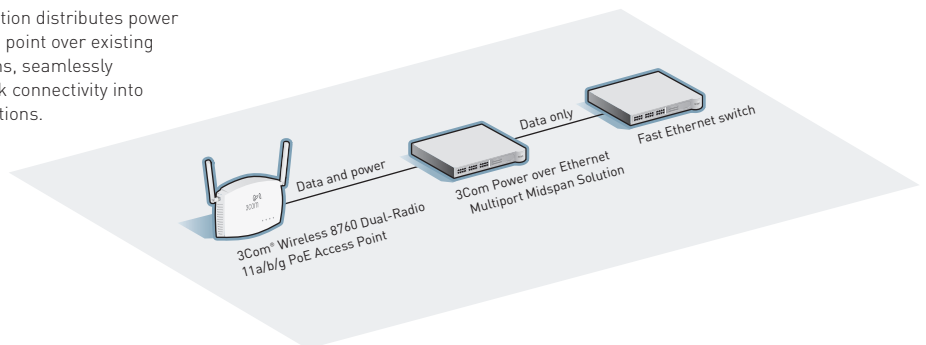
Multiple SSID Support

Multiple SSID support enables many flexible configurations, including supporting multiple client security schemes simultaneously–no need to dumb down the wireless network to support a few legacy WEP devices.
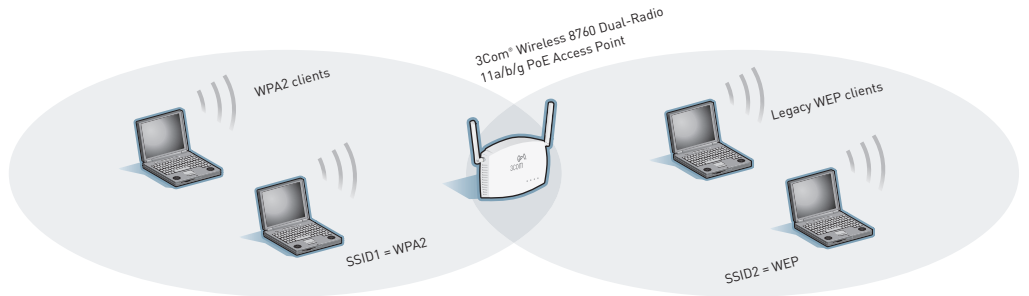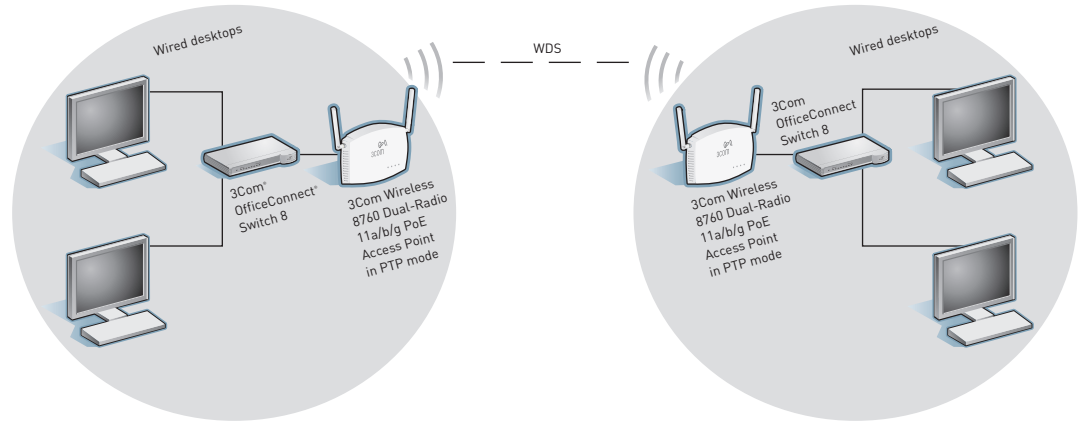
Multiple SSID and VLAN Support

With the 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point, a single Ethernet link supports multiple VLAN traffic tunnels.
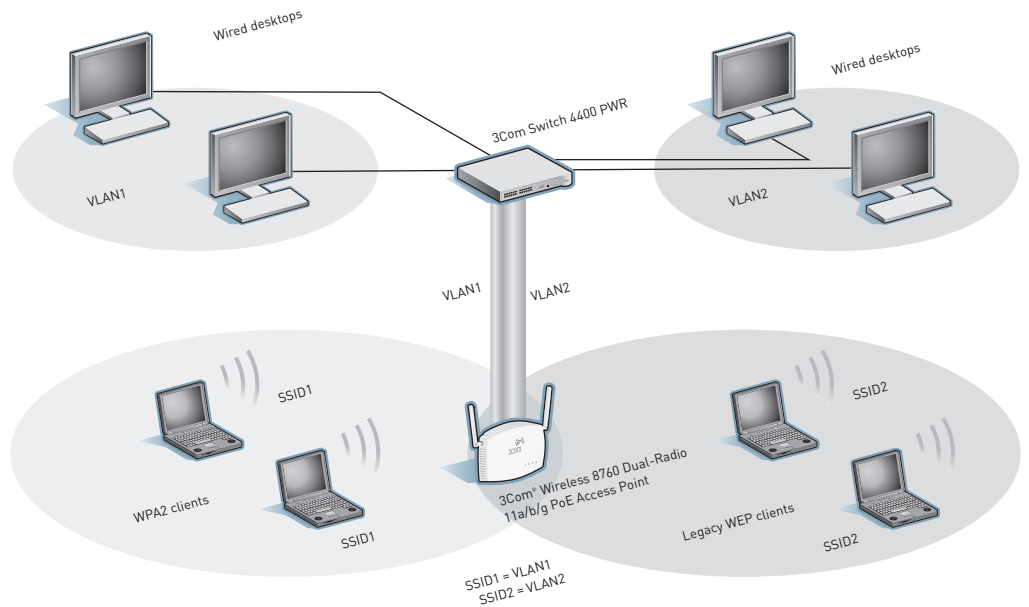
Point-to-Point WDS Link

The 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access
Point connects wired LANs with a wireless WDS link. The
APs act as wireless bridges, forwarding traffic between
LANs.

Point-to-Multipoint WDS Link

The 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point
can function as a wireless bridge in either point-to-point (PTP) or
point-to-multipoint (PTMP) modes for installation flexibility.
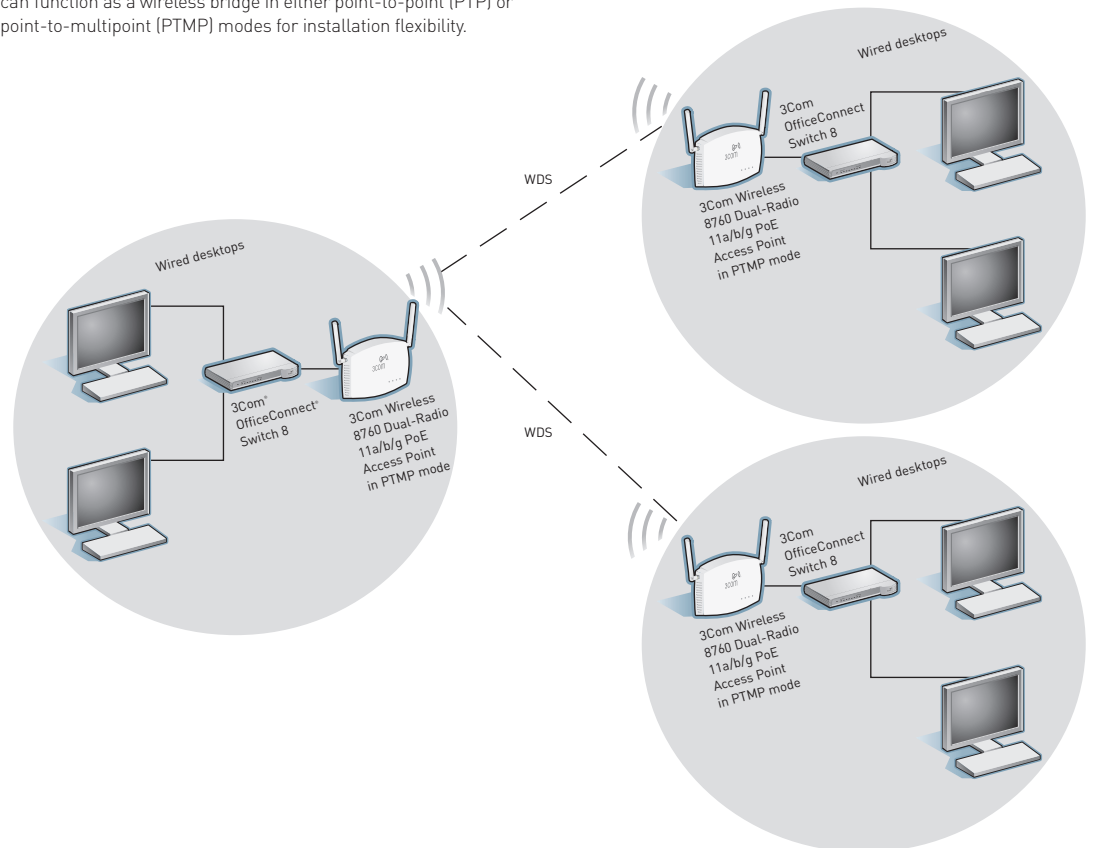
Wireless Repeater mode

The 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point can also extend the range of WLANs by acting as a wireless repeater, forwarding traffic between associated wireless workstations and another AP connected to the wired LAN.
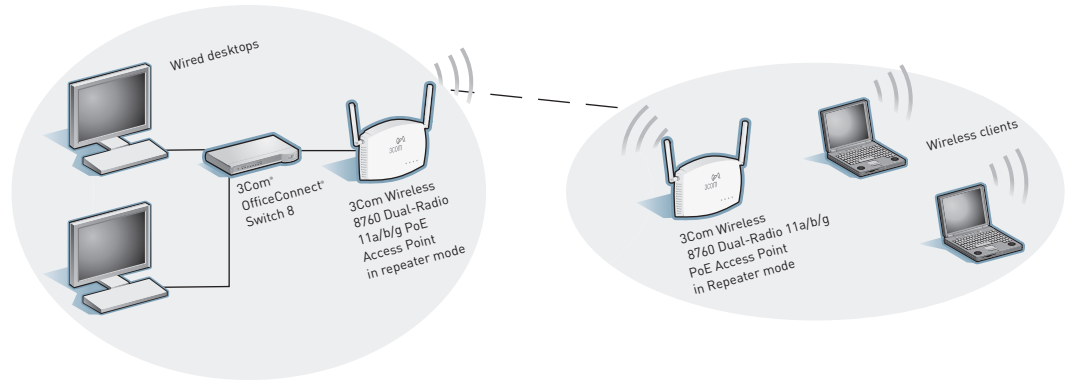
SPECIFICATIONS

Information in this section is relevant to the 3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point when used in stand-alone mode. When used in managed mode with a wireless switch or controller, see that switch or controller's documentation for details.

MINIMUM SYSTEM REQUIREMENTS
Computer with an Ethernet 10BASE-T, 10/100, or 10/100/1000 interface configured for Internet communication

Operating system that supports an Ethernet connection with an IP stack (Installation CD Discovery Application requires Windows XP, 2000 or Vista)

MEDIA INTERFACES
RJ-45, IEEE 802.11a, 802.11b, 802.11g

One 10BASE-T/100BASE-TX IEEE 802.3af-compatible PoE port with auto-negotiation

DATA RATES
802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
802.11b,g: 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps
802.11a/g turbo mode: 108, 96, 72 Mbps

FREQUENCY BAND
802.11a: 5 GHz; 802.11b/g: 2.4 GHz

USERS SUPPORTED
Up to 128 wireless users, with maximum of 64 users each on 802.11b/g and 802.11a radios

OPERATING RANGE
802.11a: up to 50 meters (164 feet) transmit and receive
802.11b/g: up to 100 meters (328 feet) transmit and receive

Unobstructed range maximum: 457 meters (1,499 feet)

OPERATING CHANNELS:
Channel availability depends on local country regulations. Wireless LAN system administrator must choose correct country of operation. Channels are then automatically configured to comply with specified country regulations.

MODULATION TECHNIQUE
DSSS (Direct Sequence Spread Spectrum)

OFDM (Orthogonal Frequency Division Multiplexing)

MEDIA ACCESS PROTOCOL
CSMA/CA

POWER CONSUMPTION
7.2 watts of PoE power with both radios active

SPECIFICATIONS
(CONTINUED)

TRANSMIT POWER SETTINGS
Based on the regulatory domain set by the system administrator, not to exceed the following:

802.11a
6 Mbps: +18 dBm
9 Mbps: +18 dBm
12 Mbps: +18 dBm
18 Mbps: +18 dBm
24 Mbps: +18 dBm
36 Mbps: +18 dBm
48 Mbps: +16 dBm
54 Mbps: +16 dBm

802.11b/g
1–11 Mbps: +18 dBm
12 Mbps: +18 dBm
18 Mbps: +18 dBm
24 Mbps: +18 dBm
36 Mbps: +18 dBm
48 Mbps: +16 dBm
54 Mbps: +16 dBm

RECEIVE SENSITIVITY
802.11a
6 Mbps: -87 dBm
9 Mbps: -86 dBm
12 Mbps: -84 dBm
18 Mbps: -82 dBm
24 Mbps: -79 dBm
36 Mbps: -75 dBm
48 Mbps: -72 dBm
54 Mbps: -71 dBm

802.11b/g
1 Mbps: -95 dBm
2 Mbps: -92 dBm
5.5 Mbps: -91dBm
6 Mbps: -89 dBm
9 Mbps: -88 dBm
11 Mbps: -88 dBm
12 Mbps: -86 dBm
18 Mbps: -84 dBm
24 Mbps: -81 dBm
36 Mbps: -77 dBm
48 Mbps: -73 dBm
54 Mbps: -72 dBm

STANDARDS CONFORMANCE
IEEE 802.11a, 802.11b, 802.11g, 802.11i, 802.3, 802.3af, 802.1X; WEP, AES, WPA, WPA2, WMM and Wi-Fi CERTIFIED

ANTENNA
2 removable 2dB gain antennas with R-SMA connector

SECURITY
WPA2 AES and TKIP encryption; 64/128/152-bit WEP encryption; 802.1X with EAP-TLS, EAP-TTLS and PEAP; WPA-PSK authentication; MAC address authentication and filtering; 802.1Q VLAN; multiple SSID; RADIUS client authentication, authorization and accounting

NETWORKING PROTOCOLS
TCP/IP, Bridging Protocol, DHCP, HTTP, HTTPS, SSH, Telnet

PERFORMANCE
Dynamic rate shifting
Packet bursting
Clear channel connect
802.11a/b/g SuperG mode

MANAGEMENT
SNMP v1, v2c and v3 support
Remote management with Web browser over SSL or HTTPS; command line interface over SSH v2 or Telnet

LEDS
Power, 10/100 Mbps, 802.11b/g activity, or 11g activity

DIMENSIONS AND WEIGHT
Height: 15.9 cm (6.25 in)
Width: 21.91 cm (8.625 in)
Depth: 4.13 cm (1.625 in)
Weight: 544.31 g (1.2 lb)

REGULATORY/AGENCY APPROVALS
Safety
UL/CSA 60950-1
EN/IEC 60950-1
NOM-019- SCFI

EMC/EMI
FCC 15 Subpart C
IC RSS-210
EN 300 328
EN 301 893
EN 301 489-1, -17
EN 60601

ENVIRONMENTAL RANGES
Operating temperature: -10 to 40°C (14 to 122°F)
Storage temperature: -40 to 70°C (-40 to 158°F)
Humidity: 10 to 95% non-condensing

PACKAGE CONTENTS
3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point
2 external dual-band 2.4/5.15GHz antennas with R-SMA connectors
Mounting hardware
PoE injector (3CNJPSE)
1.6 m CAT 5 cable
Quick Installation Guide
Support and Safety sheet
Warranty sheet
Product range sheet
CD with Discovery application and documentation

WARRANTY AND OTHER SERVICES
Three-year hardware warranty. Advanced hardware replacement and 90 days free technical support. Refer to **www.3com.com/warranty** for details.

ORDERING INFORMATION

PRODUCT DESCRIPTION	MODEL N0	3COM SKU
3Com Wireless 8760 Dual-Radio 11a/b/g PoE Access Point	WL-546	3CRWE876075

Managed Wireless LAN Access Point Antenna Options

3Com 6/8dBi Dual-Band Omni Antenna		3CWE591
3Com 3/4dBi Dual-Band Ceiling Mount Antenna		3CWE592
3Com 18/20dBi Dual-Band Panel Antenna		3CWE596
3Com 4/6dBi Dual-Band Hallway Antenna		3CWE597
3Com 8/10dBi Dual-Band Panel Antenna		3CWE598

Antenna Cables

3Com Ultra Low Loss 6 Foot Antenna Cable		3CWE580
3Com Ultra Low Loss 20-Foot Antenna Cable		3CWE581
3Com Ultra Low Loss 50-Foot Antenna Cable		3CWE582
3Com RSMA to SMA 6" Antenna Cable		3CWE586

3Com Wireless LAN-Related Products

3Com Unified Gigabit Wireless PoE Switch 24		3CRUS2475
3Com Baseline Switch 2924-PWR Plus		3CBLSG24PWR
3Com Baseline Switch 2426-PWR Plus		3C16491
3Com OfficeConnect® Managed Gigabit PoE Switch		3CDSG10PWR
3Com OfficeConnect Managed Switch 9		3CR16708-91

3Com Global Services

3Com Wireless LAN Site Survey, Network Health Check, Installation Services and Express℠ Maintenance	www.3com.com/services_quote
3Com University Courses	www.3com.com/3comu

For additional information, please visit **www.3com.com**

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