

## 3Com® Wireless LAN Managed Access Points

DATA SHEET

Strengthen wireless security and mobility while consolidating user and RF management from network edge to core

## **OVERVIEW**

3Com® wireless LAN Managed Access Points (MAPs) deliver secure, reliable connectivity for WLAN users. An integral component of the 3Com Wireless LAN Mobility System, the 3Com MAP 3750 and MAP 2750 encrypt transmissions to protect data privacy. Fully controlled by a WLAN switch or controller, they contain no local data store for sensitive data, eliminating the chance of information being compromised due to hacking or theft. The end result helps reduce capital expenses and ongoing administrative costs—all while keeping the wireless LAN secure.

## **KEY BENEFITS**

## SIMPLIFY CONFIGURATION, CONTROL AND OPTIMIZATION

With remote management, the arduous process of initially configuring and deploying access points (APs) is vastly simplified because configuration settings are centrally distributed for consistency and accuracy. And for easier long-term management, any added MAPs inherit configuration settings from their wireless switch or controller. Automated network controls at the wireless switch improve MAP coverage and service by optimizing RF gain, assigning radio channels, balancing traffic loads and monitoring the RF environment.

## **DELIVER SECURITY AND SEAMLESS MOBILITY**

Local traffic encryption distributes the encryption processing across the network rather than relying on one central device. Continuous, on-demand, or scheduled RF scans can be used to locate users and identify and isolate potentially harmful rogue APs or other infiltrators. 3Com wireless switches and controllers integrate with backend Authorization/Authentication/Accounting (AAA) servers, consistently enforcing user and group access policies across the wireless LAN to provide secure session integrity as users roam throughout the network. No re-association or IT intervention is required.

# EASE NETWORK INTEGRATION THROUGH FLEXIBLE DEPLOYMENTS

For operational flexibility, the MAP 2750 and MAP 3750 can be linked directly or indirectly to a 3Com WLAN switch or controller through existing wired networks, even across Layer 3 boundaries. For additional installation flexibility, the 3Com WLAN switch can also supply the MAPs with power, as well as data, directly over standard Ethernet cabling. The MAP 3750 supports both IEEE 802.11a and 802.11g users simultaneously; administrators can mix and match radio bands to meet different coverage and bandwidth needs.



# KEY BENEFITS (CONTINUED)

## **BOOST RELIABILITY AND RESILIENCY**

The MAP 3750 offers dual Ethernet ports with Power over Ethernet (PoE) support. With automatic failover capability for both data and electrical power, the MAP 3750 adds a level of redundancy for demanding environments and increases network uptime.

## **FEATURES**

## STANDARDS-BASED, HIGH-SPEED ARCHITECTURE

**Dual-band operation>** The software-configurable dual-mode radio on the MAP 2750 operates in 802.11a or 802.11b/g bands. The MAP 3750 radio supports IEEE 802.11a and 802.11b/g simultaneously for user flexibility.

**High-speed wireless performance>** IEEE 802.11a offers speeds up to 54 Mbps at distances up to 50 meters (164 feet); IEEE 802.11g offers speeds up to 54 Mbps at distances up to 100 meters (328 feet).

**Diversity radio antennas>** For excellent performance and coverage in high multi-path environments, the MAP 2750 ships with external dualband omnidirectional antennas; the MAP 3750 has integrated (internal) omnidirectional antennas.

#### **SECURITY**

Strong, multiple encryption> IEEE 802.11i WPA2 Advanced Encryption Standard (AES), WPA dynamic Temporal Key Integrity Protocol (TKIP) and Wi-Fi Equivalent Privacy (WEP) packet encryption help ensure strong data security.

**Virtual private group support>** Administrators can independently encrypt and isolate subnets or VLANs using the same SSID.

**RF multi-band sweeps>** Scans of the RF environment search for rogue access points, ad-hoc users and sources of RF interference.

Theft- and hacker-safe> No local data store of sensitive network data means that if a MAP is stolen, no secure information goes with it.

## **INSTALLATION EASE AND FLEXIBILITY**

**Simple installation>** No pre-staging or pre-configuration is required for new MAPS; replacement MAPs inherit configuration information from their WLAN switch or controller.

Flexible deployment topologies> MAPs can be directly and/or remotely connected to their WLAN switch and/or controller, offering a wide variety of flexible deployment scenarios.

**PoE support>** Both data and power are supplied by a 3Com wireless switch or any 802.11af-compliant device over Ethernet cabling, eliminating the need for power adapters, power cords, or AC outlets.

**Dual-mode external antenna options>** A variety of external dual-mode antennas is supported for flexible installing options.

## RESILIENCY

**PoE** and data port redundancy> If the MAP loses either the LAN or PoE connection on either port, it will automatically failover to the other port, increasing network uptime (MAP 3750 only).

## **COMPREHENSIVE MANAGEMENT AND CONTROL**

Automated transmit power and radio channel assignment>
Transmit power settings and radio channel assignments can be set to optimize the RF cell size and to support international requirements.

Remote management> Channel number, power level, SSIDs and security settings are all handled by the wireless LAN switch or controller for additional security; MAPs are not operational in stand-alone mode.

## **SPECIFICATIONS**

#### SYSTEM REQUIREMENTS

3Com Wireless LAN Controller WX4400, Wireless LAN Controller WX2200, Wireless LAN Switch WX1200, or WXR100 Remote Office Wireless LAN Switch; 3Com Wireless LAN Switch Manager recommended for MAP operation

#### **TOTAL PORTS**

3Com Wireless LAN Managed Access Point MAP 2750

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

3Com Wireless LAN Managed Access Point MAP 3750

Two 10BASE-T/100BASE-TX IEEE 802.3af-compatible PoE ports with auto-negotiation

### **MEDIA INTERFACES**

RJ-45; IEEE 802.11a, 802.11b, 802.11g

#### **DATA RATES**

IEEE 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps; Orthogonal Frequency Division Multiplexing (OFDM), with automatic fallback

IEEE 802.11b: 11, 5.5, 2, 1 Mbps; Complementary Code Keying (CCK), with automatic fallback

#### **FREQUENCY BAND**

IEEE 802.11a: 5.15-5.825 GHz; IEEE 802.11b/g: 2.4 GHz

#### MEDIA ACCESS PROTOCOL CSMA/CA

## **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's regulations.

## **OPERATING RANGE**

IEEE 802.11a: up to 50 meters (164 ft) transmit and receive

IEEE 802.11b/g: up to 100 meters (328 ft) transmit and receive

## DIVERSITY ANTENNAS

MAP 2750: Two external dual-band 2.4-2.48/5.15-5.825 GHz, 2dBi omnidirectional antennas

Additional optional antennas available MAP 3750: Two internal (integrated) dual-band 2.4-2.48/5.15-5.825 GHz, 2dBi omnidirectional antennas

## TRANSMIT POWER SETTINGS

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

## IEEE 802.11a

6 Mbps: ≥+20 dBm

9 Mbps: ≥+20 dBm

12 Mbps: ≥+20 dBm

18 Mbps: ≥+20 dBm

24 Mbps: ≥+19 dBm

36 Mbps: ≥+19 dBm 48 Mbps: ≥+16 dBm

54 Mbps: ≥+16 dBm

## IEEE 802.11b/g

1 – 11 Mbps: ≥+19 dBm (MAP 2750); ≥+20 dBm (MAP 3750)

12 Mbps: ≥+19 dBm (MAP 2750); ≥+20 dBm (MAP 3750)

18 Mbps: ≥+19 dBm (MAP 2750); ≥+20 dBm (MAP 3750)

24 Mbps: ≥+19 dBm (MAP 2750);

≥+20 dBm (MAP 3750)

36 Mbps: ≥+19 dBm

48 Mbps: ≥+19 dBm (MAP 2750); ≥+17 dBm (MAP 3750)

54 Mbps: ≥+19 dBm (MAP 2750); ≥+17 dBm (MAP 3750)

## RECEIVE SENSITIVITY

IEEE 802.11a

6 Mbps: ≤-87 dBm (MAP 2750);

≤-86 dBm (MAP 3750)

9 Mbps: ≤-86 dBm (MAP 2750); ≤-85 dBm (MAP 3750)

12 Mbps: ≤-84 dBm

18 Mbps: ≤-82 dBm

24 Mbps:  $\leq$ -79 dBm (MAP 2750);

≤-78 dBm (MAP 3750)

36 Mbps: ≤-75 dBm

48 Mbps: ≤-72 dBm (MAP 2750);

≤-69 dBm (MAP 3750)

54 Mbps: ≤-71 dBm (MAP 2750); ≤-67 dBm (MAP 3750)

## IEEE 802.11b/g

1 Mbps: ≤-95 dBm (MAP 2750);

≤-93 dBm (MAP 3750)

2 Mbps:  $\leq -92$  dBm , (MAP 2750);

≤-90 dBm (MAP 3750)

5.5 Mbps: ≤-91dBm (MAP 2750);

≤-88 dBm (MAP 3750)

6 Mbps: ≤-89 dBm (MAP 2750);

≤-88 dBm (MAP 3750)

9 Mbps: ≤-88 dBm (MAP 2750); ≤-87 dBm (MAP 3750)

11 Mbps: ≤-88 dBm (MAP 2750); ≤-85 dBm (MAP 3750)

12 Mbps: ≤-86 dBm

18 Mbps: ≤-84 dBm

24 Mbps: ≤-81 dBm (MAP 2750);

≤-80 dBm (MAP 3750)

36 Mbps: ≤-77 dBm

48 Mbps: ≤-73 dBm (MAP 2750);

≤-72 dBm (MAP 3750)

54 Mbps: ≤-72 dBm (MAP 2750); ≤-71 dBm (MAP 3750)

## **POWER CONSUMPTION**

MAP 2750: 6 W maximum

(from PoE port)

MAP 3750: 11a mode: 10 W; 11g mode: 10 W; 11 a+b/g mode: 12.95 W (from PoE ports)

## SECURITY

WEP 40/64 and 104/128-bit encryption (v1 and 2)

TKIP WPA and WPA2

(IEEE 802.11i/RSN) 64- and 128-bit AES encryption

Multiple broadcast SSID support at

the MAP

IEEE 802.1X network login IEEE 802.11i or 802.1X RADIUS

authentication

Access Control Lists (ACLs) and VLAN support at the wireless switch/controller Kensington Security Slot (MAP 3750)

## **SPECIFICATIONS** (CONTINUED)

#### **MANAGEMENT**

Remote management with Web browser over SSL or HTTPS; command line interface over SSH v2 or Telnet

#### I FDS

MAP 2750: power, 10/100 Mbps, IEEE 802.11a, 11b, or 11g activity MAP 3750: Radio 1, Radio 2, Health

## STANDARDS CONFORMANCE

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

## **REGULATORY/AGENCY APPROVALS**

UL 60950 2000 +ZB and ZC deviations EN60950 1999

CSA 22.2 60950 3rd edition

NOM-119 SCFI AS/NZS 60950 2000

EMC/EMI

EN55022 Class A, FCC 15 Subpart B Class A

EN 60111 3-2, ICES-003 Class A

VCCI Class A CNS 13438 Class A

EN55024

### **DIMENSIONS AND WEIGHT**

MAP 2750

Height: 16.6 cm (6.50 in) Width: 8.3 cm (3.25 in) Depth: 3.2 cm (1.25 in) Weight: 200 g (7.0 oz)

MAP 3750

Diameter: 16.8 cm (6.60 in) Depth: 4.7 cm (1.85 in) Weight: 354g (12.5 oz)

#### **ENVIRONMENTAL RANGES**

Operating temperature: -10 to 40°C

(14 to 104°F)

Storage temperature: -40 to 70°C

(-40 to 158°F)

Humidity: 10 to 95% non-condensing

## PACKAGE CONTENTS

3Com managed WLAN access point Two external dual-band 2.4-2.48/ 5.15-5.825 GHz antennas (MAP 2750) Mounting hardware Quick Start guide Warranty booklet

## **WARRANTY AND OTHER SERVICES**

Limited Hardware Warranty for one year. 90 days free technical support. Refer to www.3com.com/warranty for details.

> 3CRWXR10095A 3CWXM10A

## **ORDERING** INFORMATION

PRODUCT DESCRIPTION	3COM SKU
3Com Wireless LAN Managed Access Point 2750	3CRWX275075A
3Com Wireless LAN Managed Access Point 3750	3CRWX375075A

#### Wireless LAN Controller, Switches and Software<sup>1</sup> 3Com Wireless LAN Controller WX4400 3CRWX440095A 3CRWX220095A 3Com Wireless LAN Controller WX2200 3Com Wireless LAN Switch WX1200 3CRWX120695A

## Managed Wireless LAN Access Point Antenna Options

3Com WXR100 Remote Office Wireless LAN Switch

3Com Wireless LAN Switch Manager

3Com 6/8dBi Dual Band Omni Antenna	3CWE591
3Com 3/4dBi Dual Band Ceiling Mount Antenna	3CWE592
3Com 4/6dBi Dual Band Hallway Antenna	3CWE597
3Com 8/10dBi Dual Band Panel Antenna <sup>2</sup>	3CWE598
3Com Ultra Low Loss 6 Foot Antenna Cable	3CWE580

## 3Com Global Services

3Com Wireless LAN Site Survey, Network Health Check,

Installation Services and Express<sup>SM</sup> Maintenance www.3com.com/services\_quote 3Com University Courses www.3com.com/3comu

2 For use only with the MAP 3750.



<sup>1</sup> LAN Controller or LAN Switch and Switch Manager software required for operation of managed access point.