3Com

3Com® Wireless 11n Cable/DSL Firewall Router

802.11n technology enables faster information transfer, wirelessly, over longer ranges; robust security features allow wired and wireless users to confidently share a single broadband Internet connection

OVERVIEW

The 3Com® Wireless 11n Cable/DSL Firewall Router delivers significant wireless speed and range improvements over IEEE 802.11g. Its robust and high-speed routing engine and security features allow up to 253 wired and wireless users to share a single broadband connection.

With wireless speeds of up to 300[†] Mbps, this router—compliant with the IEEE 802.11n draft 2.0 standard and Wi-Fi CERTIFIED™—is able to handle high-bandwidth applications confidently. IP Quality of Service (QoS) helps ensure that critical time-sensitive traffic gets the priority needed for quality communications.

Advanced security features, including 128-bit WPA™/WPA2™ wireless encryption, firewall, hacker pattern detection, VPN IPSec, URL filtering, and IP and MAC address filtering, provide high level protection against hacking and snooping. Easy to set up and use, this product is backed by a two-year hardware warranty.

KEY BENEFITS

HIGH-SPEED SHARED WIRED AND WIRELESS CONNECTIVITY

Delivering wireless speeds of up to 300 Mbps, the 3Com Wireless 11n Cable/DSL Firewall Router easily handles large data transfers and Internet downloads, including those from multimedia applications.

This router is backward-compatible with IEEE 802.11b and .11g wireless devices, preserving existing network investments. It is Wi-Fi CERTIFIED and interoperates with other certified Wi-Fi® products.

The 3Com Wireless 11n Cable/DSL Firewall Router has a built-in four-port 10/100 Ethernet LAN switch, which enables up to 253 total (32 wireless) users to securely share a single cable or DSL Internet connection, reducing broadband expenses.

[†] Wireless performance depends on number of users, physical and environmental conditions and other electronic devices in the area.

3Com Wireless 11n Cable/DSL Firewall Router

KEY BENEFITS
(CONTINUED)

STANDARDS-BASED FOR INTEROPERABILITY

The 3Com Wireless 11n Cable/DSL Firewall Router uses IEEE 802.11n draft 2.0 technology to deliver significant wireless speed and range improvements over IEEE 802.11g networks. With two external and one internal antennas and advanced Multiple Input Multiple Output (MIMO) technology, the enhanced wireless range of this router helps provides single point coverage in small office and home networking environments, and can eliminate dead spots common with other wireless LANs.

HIGHLY-EVOLVED SECURITY FEATURES

Advanced wireless security and multiple firewall features offer high levels of protection for the network. To help shield wireless connections, this router provides 128-bit WPA/WPA2 with TKIP/AES encryption that encodes and protects information, providing maximum security. For legacy clients, WEP encryption is also supported.

URL filtering, a Stateful Packet Inspection (SPI) firewall with hacker pattern detection and other security features help protect the entire network from attacks and other Internet security risks. Support for initiation and termination of Internet Protocol security (IPSec) tunnels helps enable security between business sites.

ADVANCED QUALITY OF SERVICE (QOS) FOR QUALITY-SENSITIVE INFORMATION TRANSFER

A unique combination of features helps assure reliable delivery—with no interruption—of delay-sensitive information like voice and video.

RELIABLE, SIMPLE TO USE AND GREEN

Designed to meet 3Com's proven standards of quality, reliability is assured and supported by a two-year hardware warranty. A browser-based user interface and simple setup wizards ease installation, configuration and administration.

All-in-one design integrates four functions— .11n access point, 4-port switch, firewall and routing—into one product, simplifying deployment.

With the push of a button, Wi-Fi Protected Setup™ (WPS) is easily enabled, automating and simplifying the creation of a secure wireless network. Other features like a Wi-Fi "on-off" button make this product easy-to-use while also reducing power costs.

SEAMLESS INTEROPERABILITY FOR .11N

3Com offers a variety of compatible 802.11n wireless devices:

› 3Com Wireless 11n PCI Adapter, **3CRPCIN175**

› 3Com Wireless 11n USB Adapter, **3CRUSBN175**

WIRELESS PERFORMANCE COMPARISON

Performance Measure[‡]	IEEE Specification		
	802.11b	802.11g	802.11n[¥]
Maximum data rate	11 Mbps	54 Mbps	300 Mbps
Maximum operating range	35 m (115 ft)	35 m (115 ft)	70 m (230 ft)

[‡] Performance measures are theoretical maximums based on the IEEE specification. Actual performance may vary, based on total number of simultaneous users, amount of traffic generated by each user, physical and environmental conditions and other electronic devices in the area.

[¥] Draft 2.0 standard. Performance is with 2 streams and when using MIMO.

FEATURES AND BENEFITS

Shared Internet Access

Wired and wireless user support	Enables up to 253 total (32 wireless) users to share a single cable or DSL connection, making the most of your broadband service
Flexible broadband support	Connects to either cable or DSL modems for configuration flexibility

High-Speed Wireless Connectivity

802.11n 300 Mbps performance	Delivers connections significantly faster than 802.11g
Backward compatible with 11b/g users	Supports high speeds while protecting existing investments
Multiple Input Multiple Output (MIMO)	Advanced MIMO technology provides enhanced wireless range and coverage area for improved roaming and ubiquity
Packet bursting	Increases throughput by sending more frames in a given time period

Robust Security

WPA/WPA2 (Wi-Fi Protected Access) and WEP (Wired Equivalent Privacy)	Supports advanced 128-bit WPA/WPA2 encryption, and 40-/64- and 128-bit WEP encryption for legacy wireless clients
Multi-level wireless security	Provides additional wireless security with SSID Broadcast Disable and MAC filtering
Firewall	Full SPI firewall, access control rules, DoS protection and other features helps protect your network from the security risks of always-on broadband connections
Internet protocol security (IPSec)	Enables secure site-to-site communication with up to five concurrent IPSec tunnels
Proxy Address Resolution Protocol (ARP)	Proxy ARP allows secure setup of public servers behind router firewall

Networking and QoS

IP (RIP 1 and 2) and static routing	Allows the router to be used in multi-network environments
WiFi Multimedia (WMM®), QoS and VLAN support	Improves the user experience for audio, video and voice applications
Internet Group Management Protocol (IGMP) snooping and query	Allows more efficient use of resources when supporting multicast-based applications like online streaming video and gaming
Wi-Fi Distribution System (WDS)	Easily expands network coverage using compatible WDS-enabled APs
Dynamic Domain Name Service (DNS)	Enables Internet connections with dynamic IP addresses to network applications such as Web or FTP servers that normally require static IP addresses (requires subscription with Dynamic DNS providers)

Built-In Ease of Use

Set-up wizards, pre-set defaults, and intuitive browser interface	Makes set up and configuration easy
Easy one-button access to WPS and wireless connectivity enablement	Secure your wireless network with just one push of a button; reduce power consumption by turning off wireless connectivity when not needed

SPECIFICATIONS

MINIMUM SYSTEM REQUIREMENTS

Operating system that supports an Ethernet connection with an IP stack

Computer with an Ethernet 10BASE-T or 10/100 interface configured for network communication

Wi-Fi-certified IEEE 802.11n draft 2.0-compliant, 802.11g or 802.11b adapter cards for wireless access

An active cable or DSL broadband connection

Installation CD requires Windows 95 or later

USERS SUPPORTED*

Up to 253 total simultaneous users

32 wireless users; MAC filter 32 clients

HARDWARE CONFIGURATION

LAN: 4 autosensing 10BASE-T/100BASE-TX ports

WAN: 1 autosensing 10BASE-T/100BASE-TX port

Wi-Fi on/off button

Wi-Fi protected setup (WPS) button

3 antennas: 2 fixed external and 1 internal

WIRELESS NETWORKING

Wireless distribution system (WDS); repeater mode for up to 4 links

WDS over WEP and WPA/WPA2

20 Mhz and 40 Mhz channels support

WMM (IEEE 802.11e)

WiFi protected setup (WPS); PIN and PBC modes

SSID broadcast disable

MAC address filtering

300 Mbps† performance

FREQUENCY BAND

2.4-2.4835 GHz

WIRELESS MEDIUM

OFDM, CCK

MEDIA ACCESS PROTOCOL

CSMA/CA

PROTOCOL SET

Dynamic and static IP addressing

MAC address cloning

DHCP server

IP to MAC address binding

NAT/PAT (with TCP and UDP), PPPoE, PPTP, IP, PAP, CHAP, MS CHAP, IPCP, SNTP, L2TP

ROUTING AND NETWORKING

RIP 1 and 2

Static routing

IGMP snooping

Port-based VLANs

QUALITY OF SERVICE

WMM

Differentiated services (DiffServ); mark/remark up to 16 mapping rules

SECURITY

128-bit WPA/WPA2 with TKIP/AES wireless encryption

40-/64-bit and 128-bit WEP encryption

URL and keyword filtering (black and white lists, 20 entries)

Special application support (port triggering; 20 entries accepting commas and hyphens)

Virtual server support (port forwarding; 20 entries)

Time scheduling (10 rules)

PC privileges (IP address-based ACL; 10 groups)

Proxy ARP support (RFC 1027)

Virtual DMZ support (up to 8 servers)

SSID Broadcast Disable

MAC address filtering

NAT/PAT/NAT off

Traffic metering

Full stateful packet inspection (SPI) firewall with DoS/DDoS protection

NAT-T draft 2.0

SIP ALG

VPN

IPSec, PPTP and L2TP/IPSec passthrough

Initiation/termination of up to five concurrent IPSec tunnels

Encryption: DES, 3DES, AES-128, AES-256

Key management: IKE (main and aggressive modes)

IKE keep-alive

FQDN support

PFS

CONFIGURATION AND MANAGEMENT

Browser-based administration

Preset defaults

Remote management via HTTP

Save and restore configuration files

E-mail alerts

Syslog server support

SNMP v1/2c (MIBII)

LED INDICATORS

Power (3Com logo, white)

Alert (amber)

Broadband connection (blue)

Wireless LAN (blue)

LAN ports 1-4 (blue)

WPS (blue)

DIMENSIONS

Height (with rubber feet):
4.0 cm (1.6 in), antenna folded;
10.0 cm (3.9 in), antenna unfolded

Width: 17.8 cm (7.0 in)

Depth (with antenna): 16.0 cm (6.3 in)

Weight: 300g (0.66 lb)

POWER

Operating output: 12 VDC, 1A

Maximum power consumption: 12W

Supplied via included energy efficient power supply

REGULATORY/AGENCY APPROVALS

Safety: UL 60950-1, CSA 22.2 No. 60950-1-03, EN 60950-1: 2001, IEC 60950-1: 2001.

Emission: CFR Title 47, FCC Part 15 Subpart B & C, ICES-003, Industry Canada RSS-210, Industry Canada RSS-Gen, EN 300 328, EN 301 489-1/17, EN 55022 Class B, EN 55024

Environmental: EN 60068 (IEC 68)

PACKAGE CONTENTS

3Com Wireless 11n Cable/DSL Firewall Router

Power supply

Install Guide

CD ROM containing Discovery program and User Guide

One straight-through category 5 UTP patch cable

Four rubber feet

WARRANTY AND OTHER SERVICES

Two Year Limited Hardware Warranty

Limited Software Warranty for 90 days

90 days of telephone technical support

Refer to www.3com.com/warranty for details.

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* Total number of simultaneous users depends on speed of broadband connection and amount of traffic generated by each user.

† Wireless performance depends on number of users, physical and environmental conditions and other electronic devices in the area.

ORDERING INFORMATION

PRODUCT DESCRIPTION	MODEL	3COM SKU
3Com Wireless 11n Cable/DSL Firewall Router	WL-602	3CRWER300-73

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

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