

3COM® OFFICECONNECT MANAGED GIGABIT POE SWITCH

Enterprise class, Layer 2 10/100/1000 switch for business of all sizes, as well as remote branch offices, voice ready with PoE and advanced features for network control and flexibility

OVERVIEW

The 3Com® OfficeConnect® Managed Gigabit PoE Switch delivers Layer 2 enterprise-class Gigabit switching solutions, customized and priced for small and mid-sized organizations, in a compact and quiet 13" desktop enclosure.

This managed switch offers tremendous value to small and medium businesses looking for a low cost solution who need a level of control over their network not offered by unmanaged switching products, without sacrificing the advanced functionality normally found on higher-end managed switching products.

KEY BENEFITS

LAYER 2 SWITCHING WITH ADVANCED FEATURES

The OfficeConnect Managed Gigabit PoE Switch helps build a voice ready network—with 3Com's unique auto-voice VLAN, advanced voice QoS, SNMP-based management, Power over Ethernet (PoE) and other features.

This switch has ten PoE-enabled 10/100/1000 ports, and a dual-purpose Gigabit port (configurable as 10/100/1000 copper or SFP-based fiber) to connect to high-performance computers, servers, or network backbones.

To ensure optimal use of the network bandwidth and deliver maximum voice and data quality, traffic flow can be directed according to the needs of the business using Spanning Tree and Rapid Spanning Tree, traffic prioritization, priority queuing and VLANs.

Link aggregation can be done via IEEE 802.3ad LACP or manually, allowing ports to be grouped together to form an ultra-high-bandwidth connection that greatly



3Com OfficeConnect Managed Gigabit PoE Switch

expands bandwidth capacity to the network core or other parts of the network.

ENTERPRISE-QUALITY SECURITY

Enterprise-quality security is provided with IEEE 802.1X network login and Access Control Lists (ACLs), which enable usage policies via the switch at each point of access to the network. All management communications are encrypted with HTTPS.

POWER OVER ETHERNET

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

NO SWITCH SETUP REQUIRED

The OfficeConnect Managed Gigabit PoE Switch is operational straight out-of-the-box; as long as default settings are acceptable, there is no need to configure it. If desired, the switch can be configured using a web browser, console port, or SNMP management software.

ENHANCED INTUITIVE MANAGEMENT OPTIONS

For networks that require more control, the switch web management interface provides an intuitive, menu-driven process for even novice users to quickly and confidently configure the switch during initial setup and manage it during normal operation. Graphical switch and port views provide a clear understanding of switch status and configuration.



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KEY BENEFITS (continued)

In addition, the web interface features individual port-traffic monitoring (port mirroring) and MAC address port mapping tables. A cable diagnostic tool lets users troubleshoot basic connectivity problems via the web management interface further simplifying network installation.

The OfficeConnect Managed Gigabit PoE Switch is also supported by 3Com Network Supervisor (3NS) and 3Com Network Director (3ND) management software.

3NS and 3ND can be used to map the network topology, indicating what devices are connected, and on what ports. Switch management and software upgrades can be easily done. Other SNMP-based management tools may also be used.

The Switch family also supports a compact Command Line Interface (CLI) that is accessed via the front panel console port. Using the CLI, major switch management options can be quickly configured.

FEATURE HIGHLIGHTS

FEATURE DESCRIPTION

Performance

VLANs	Segment the network by grouping users based on their data or traffic exchange requirements. This ensures optimal use of available bandwidth as traffic flow is directed according to the needs of the business.
Advanced QoS and traffic shaping	Traffic prioritization, using IEEE 802.1p Quality of Service (QoS) and Type of Service (TOS) with Differentiated Services Code Point (DSCP), and ingress/egress rate shaping help ensure that critical time-sensitive traffic like voice gets the priority needed for quality communications.
Link aggregation (trunking)	Group together any number of ports automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; help prevent traffic bottlenecks.
Rapid Spanning Tree Protocol support	Improves network compatibility, scalability and availability.
IGMP snooping	Multicast filtering optimizes network performance, instead of flooding traffic to all ports.
Unique voice features	Automatic assignment of voice traffic to separate VLANs ("auto-voice VLAN"), advanced voice QoS, traffic shaping, multicast filtering and PoE support delivers the support necessary for quality voice communications.
Flexible Gigabit uplink	Daisychain multiple units together via the built-in copper Gigabit uplink port or connect to a network backbone via SFP-based fiber modules.
PoE support	Provides power for IP phones, wireless LAN access points, and other IEEE 802.3af-compliant devices over the same cable used for data; lowers total cost of ownership since there is no need to run additional electrical wiring.
Fanless design	Silent operation whether used in a rack or desktop situation.

Security

IEEE 802.1X network access control	Provides standards-based security combined with local authentication.
Advanced Access Control Lists (ACLs)	MAC- and IP-based ACLs enable network traffic filtering and enhance network control.
Traffic monitoring (port mirroring)	Administrators can examine suspect data streams received on any port by mirroring the data stream to a monitoring port.

Configuration and management

Enhanced browser-based interface	Graphical user interface allows even the most novice users to configure the switch during initial setup and monitor it during normal operation.
SNMP support tools.	Switch can be managed with 3Com Network Supervisor, Network Director and other SNMP-compatible tools.
PoE configuration	PoE power can be enabled or disabled per unit and per port; power can also be limited per port.
Cable diagnostics	Remotely detect copper cable issues using a browser-based tool.

OFFICECONNECT MANAGED GIGABIT POE SWITCH USER INTERFACE

INTUITIVE BROWSER-BASED INTERFACE

With the switch web management interface, even novice users can quickly and confidently configure the switch during initial setup and manage it during normal operation. Graphical switch and port views provide a clear understanding of switch status and configuration.



Device summary information for the Managed Gigabit PoE Switch.

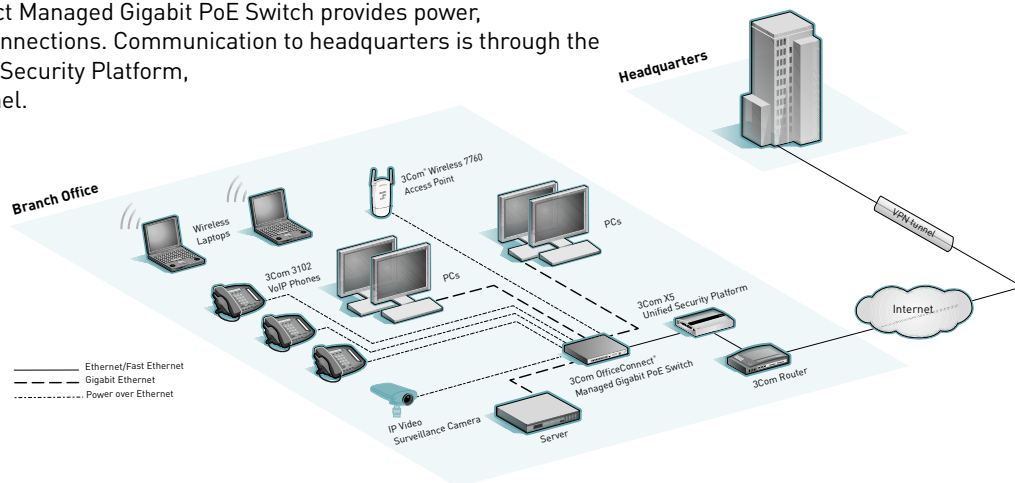


PoE summary information for the Managed Gigabit PoE Switch.

OFFICECONNECT MANAGED GIGABIT POE SWITCH IN A CONVERGED NETWORK

SECURE CONVERGED NETWORKING IN THE BRANCH OFFICE

The OfficeConnect Managed Gigabit PoE Switch provides power, voice and data connections. Communication to headquarters is through the 3Com X5 Unified Security Platform, using a VPN tunnel.



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 OfficeConnect Managed Gigabit PoE Switch is an integral component of this approach, offering:

- > Automatic assignment of voice traffic to separate VLANs
- > IEEE 802.1p prioritization and 802.1Q VLANs
- > Advanced QoS and traffic shaping capabilities
- > IEEE 802.1X authentication
- > Power over Ethernet

SPECIFICATIONS

CONNECTORS

10 auto-negotiating 10BASE-T/100BASE-TX/1000BASE-T configured as auto MDI/MDIX
1 Gigabit SFP port, dual-purposed with 1 of the above 10/100/1000 ports (configurable as 10/100/1000 or SFP)

All copper ports are auto MDI/MDIX, auto-negotiating RJ-45; PoE-enabled
Front-mounted console port

PERFORMANCE

20 Gbps switching capacity, max.
14.8 Mpps forwarding rate, max.
Wirespeed performance
Store-and-forward switching

LAYER 2 SWITCHING

8,192 MAC addresses in address table
256 port-based VLANs (IEEE 802.1Q)
IEEE 802.3ad Link Aggregation, automated (LACP) and manual aggregation: 4 trunks, max.; 8 ports per trunk, max.
Auto-negotiation of port speed and duplex
Auto-voice VLAN for automatic vendor-independent segregation and prioritization of VoIP traffic
IEEE 802.3x flow control (half- and full-duplex)
IEEE 802.1D Spanning Tree Protocol (STP)
IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
Internet Group Management Protocol (IGMP) v1 and 2 on Layer 2 interfaces
Jumbo frames (up to 9K bytes)
Multicast filtering

CONVERGENCE

4 hardware queues per port, with IEEE 802.1p Class of Service/Quality of Service (CoS/QoS) on egress
Weighted Round Robin queuing
Traffic prioritization at Layer 2 using 802.1p QoS, and at Layer 3 using Type of Service (TOS) with Differentiated Services Code Point (DSCP)
Ingress/egress rate shaping
Auto VLAN assignment for voice traffic determined by vendor OUI
CoS remarking for prioritization of VoIP traffic

SECURITY

IEEE 802.1X Network login
Access Control Lists (ACLs)
MAC-based Layer 2 filtering rules:

- source/destination address
- Ethertype
- CoS
- VLAN

 IP-based Layer 3 filtering rules:

- protocol
- source/destination address
- TCP/UDP port
- DSCP value
- IP precedence

 Management communications are encrypted via HTTPS

POWER OVER ETHERNET

IEEE 802.3af
62W per switch, max.

MANAGEMENT

Web-based configuration and management
System configuration with SNMP v1 and 2
Compatible with SNMP management tools like 3Com Network Supervisor and 3Com Network Director
CLI via console
Management communications are encrypted via HTTPS

LED INDICATORS

Module present, power, network traffic/duplex mode, link status/speed

AT-A-GLANCE TRAFFIC MONITORING

Ports: active, enabled, disabled
Modules: present, active

POWER SUPPLY

Input voltage: 100-240 VAC, 50/60 Hz
Current rating: 2A, max.
Power dissipation: 358.4 BTU/hr, max.
Power inlet: IEC 320

DIMENSIONS

Height: 4.4 cm (1.7 in or 1 RU)
Width: 33.0 cm (13.0 in)
Depth: 20.3 cm (8.0 in)
Weight: 2.2 kg (4.9 lb)

ENVIRONMENTAL REQUIREMENTS

Operating temperature: 0° to 40°C (32° to 104°F)
Operating humidity: 10 to 95% (non-condensing)
Standard: EN 60068 (IEC 68)

REGULATORY AND AGENCY APPROVALS

Safety: UL 60950-1, EN 60950-1, CSA 22.2 60950-1, IEC 60950-1
Emissions: EN 55022 Class A, EN 61000-3-2, EN 61000-3-3, FCC Part 15 Subpart B Class A, CISPR22 Class A, ICES-003 Class A, VCCI Class A
Immunity: EN 55024

IEEE STANDARDS SUPPORTED

IEEE 802.1d Spanning Tree
IEEE 802.1p Priority Tags
IEEE 802.1Q VLANs
IEEE 802.1X Port Security
IEEE 802.1w Rapid Spanning Tree
IEEE 802.3 Ethernet
IEEE 802.3ab Gigabit Ethernet
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
ISO 8802-3

PACKAGE CONTENTS

Switch unit, rack mount kit, power cord, self-adhesive rubber pads, console cable, product CD, warranty and safety information flyer

WARRANTY AND OTHER SERVICES

Three Year Limited Hardware Warranty
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 OfficeConnect Managed Gigabit PoE Switch

3COM SKU

3CDSG10PWR

TRANSCEIVERS

3Com 1000BASE-SX SFP	3CSFP91
3Com 1000BASE-LX SFP	3CSFP92

3COM GLOBAL SERVICES

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Network Health Check, Installation Services and Express SM Maintenance	
3Com University Courses	www.3com.com/3comu

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