3COM OFFICECONNECT MANAGED FAST ETHERNET POE SWITCH

3Com OfficeConnect Managed Fast Ethernet PoE Switch

OVERVIEW

The 3Com® OfficeConnect® Managed Fast Ethernet PoE Switch delivers Layer 2 enterprise-class Fast Ethernet 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 Fast Ethernet 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 eight PoE-enabled 10/100 ports, and one 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 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 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 Fast Ethernet 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. The switch also supports pre-std IEEE 802.3at PoE plus which enables the port to drive up to 29.6 W per port.

NO SWITCH SETUP REQUIRED

The OfficeConnect Managed Fast Ethernet 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,

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KEY BENEFITS (continued)

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.

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 Fast Ethernet 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 full Command Line Interface (CLI) that is accessed via the front panel console port and Telnet/SSH support for remote management via CLI interface. Using the CLI, major switch management options can be quickly configured.

FEATURE HIGHLIGHTS

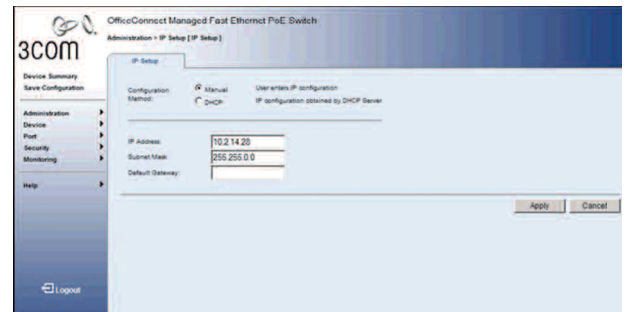| FEATURE	DESCRIPTION
VLANs	Segment the network by grouping users based on their data or traffic exchange requirements. This ensures optimal use of available bandwidth as traffic flow is directed according to the needs of the business.
Advanced QoS and traffic shaping	Traffic prioritization, using IEEE 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	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 FAST ETHERNET 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.

IP summary information for the Managed Fast Ethernet PoE Switch.
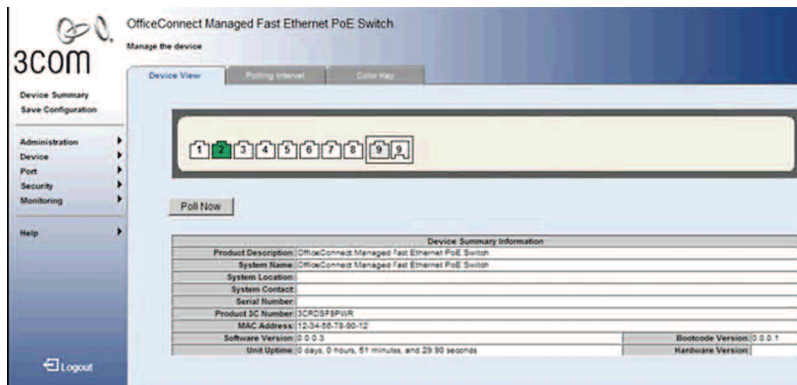
Device summary information for the Managed Fast Ethernet PoE Switch.

OFFICECONNECT MANAGED FAST ETHERNET POE SWITCH IN A CONVERGED NETWORK

Secure Converged Networking in the Branch Office

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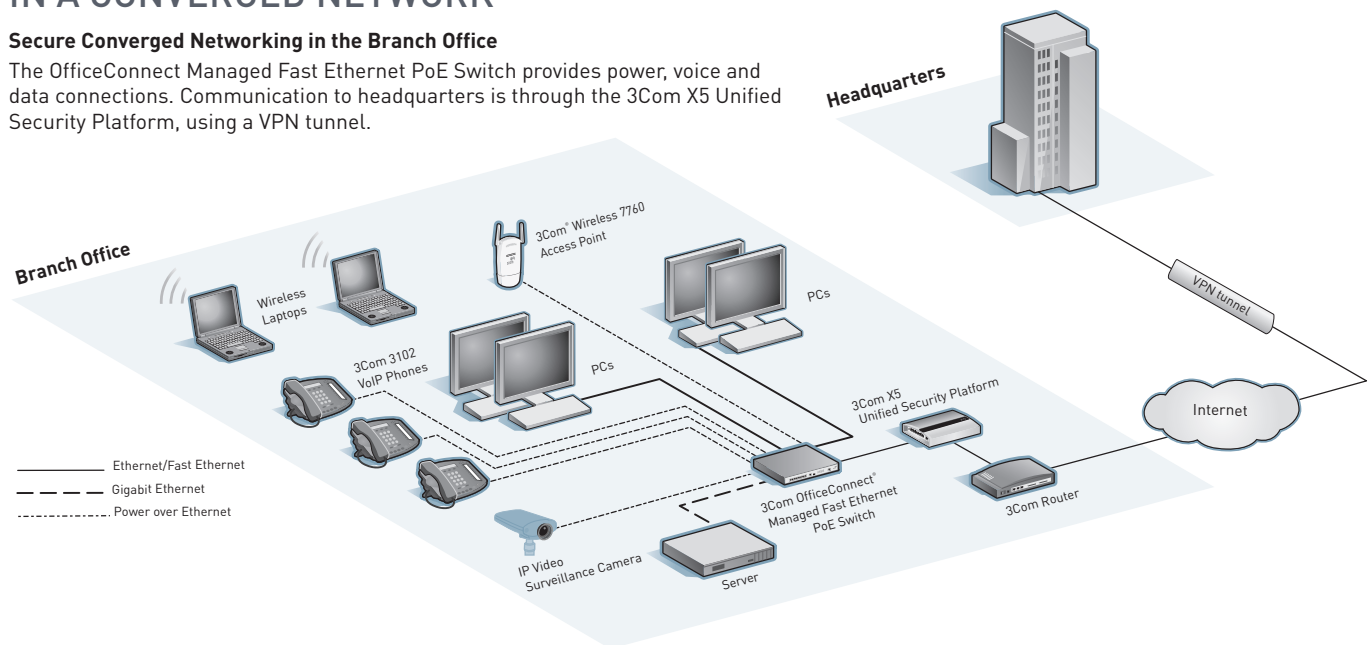
VOICE READY NETWORK

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 Fast Ethernet 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
8 auto-negotiating 10BASE-T/100BASE-TX/configured as auto MDI/MDIX
1 Gigabit SFP port, dual-purposed 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
3.6 Gbps switching capacity, max.
2.66 Mpps forwarding rate, max.
Wirespeed performance
Store-and-forward switching

LAYER 2 SWITCHING
4K MAC addresses in address table
64 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 or SSH

POWER OVER ETHERNET
IEEE 802.3af
62W per switch, max. pre-std. IEEE 802.3at

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, telnet and SSH management communications are encrypted via HTTPS

LED INDICATORS
Active, power, link activity, duplex, PoE status

AT-A-GLANCE TRAFFIC MONITORING
Ports: active, enabled, disabled
Modules: present, active PoE Status: enabled/disabled

POWER SUPPLY
Input voltage: 100-240 VAC, 50/60 Hz
Current rating: 2A, max.
Power dissipation: 35.83 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: 2.06 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, 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.

SERVICE AND SUPPORT

3Com Global Services offers the resources and talents of a major corporation plus more than two decades of experience in resolving network challenges and delivering business benefits to enterprises around the world.

Global support with a personalized, local focus in the local language helps drive productivity and minimize expenses. Because 3Com understands both the technology and the business, we're the partner you need to remain strong and competitive.

ORDERING INFORMATION

PRODUCT DESCRIPTION	3COM SKU
3Com OfficeConnect Managed Fast Ethernet PoE Switch	3CRDSF9PWR
Transceivers	
3Com 1000BASE-SX SFP	3CSFP91
3Com 1000BASE-LX SFP	3CSFP92R

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