3COM OFFICECONNECT MANAGED GIGABIT SWITCH

3Com OfficeConnect Managed Gigabit Switch

OVERVIEW

The 3Com® OfficeConnect® Managed Gigabit Switch delivers Layer 2 enterprise-class Gigabit switching solutions, customized and priced for small and mid-sized organizations, in a compact and quiet 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 Switch helps build a voice ready network—with advanced voice QoS, SNMP-based management, Radius authentication and other features.

This switch has seven 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 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, which enable usage policies via the switch at each point of access to the network.

NO SWITCH SETUP REQUIRED

The OfficeConnect Managed Gigabit 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.

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

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KEY BENEFITS (continued)

The Switch family also supports a compact Command Line Interface (CLI) that is accessed via the front panel console port. Using the CLI, initial switch configuration and setup can be done quickly.

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), 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.
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.
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	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 SNMP-compatible tools.
Cable diagnostics	Remotely detect copper cable issues using a browser-based tool.

OFFICECONNECT MANAGED GIGABIT SWITCH IN A SAMPLE NETWORK
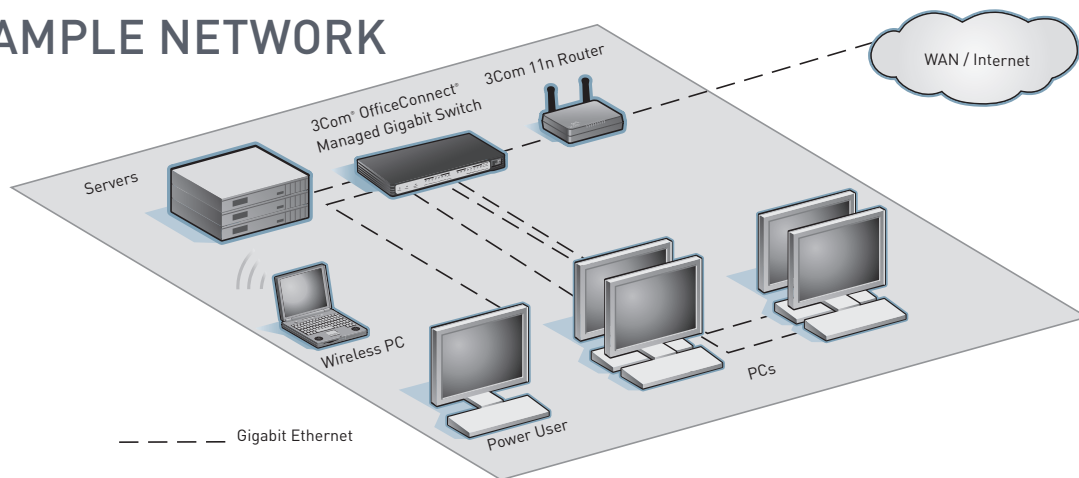
SPECIFICATIONS

CONNECTORS
8 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-4
Front-mounted console port

PERFORMANCE
16 Gbps switching capacity, max.
11.4 Mpps forwarding rate, max.
Wirespeed performance
Store-and-forward switching

LAYER 2 SWITCHING
8,192 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
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)

SECURITY
IEEE 802.1X Network login

MANAGEMENT
Web-based configuration and management
System configuration with SNMP v1 and 2
Limited CLI via console for initial configuration.

LED INDICATORS
Power, Status, Module Active, Port Status, Duplex

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

POWER SUPPLY
External power adapter input voltage: 12VDC
Current Rating: 1A max.
Power Dissipation: 20.5 BTU/ Hr, max.

DIMENSIONS
Height: 2.25cm
Width: 22.5cm
Depth: 13.5cm
Weight: 0.8kgs

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
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 802.3u 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 Gigabit Switch	3CDSG8
TRANSCEIVERS	
3Com 1000BASE-SX SFP	3CSFP91
3Com 1000BASE-LX SFP	3CSFP92
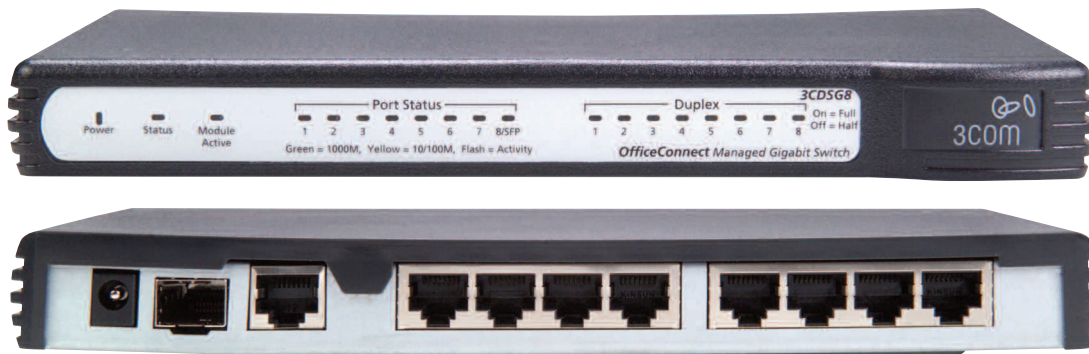
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