

AT-8000S/48POE

Layer 2 Stackable Fast Ethernet Switch

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48 port stackable 10/100TX Power over Ethernet switch with 2 active SFP bays (unpopulated) and 2 standby 10/100/1000T ports (RJ-45)

Overview

One of a series of stackable switches from Allied Telesis, the AT-8000S/48POE provides high performance Layer 2 switching in an affordable fixed configuration platform combined with Power over Ethernet to provide power to edge devices including IP phones and wireless access points. This switch offers 48 10/100 ports, two fixed SFP combo slots plus two integrated stacking connectors that deliver a total of 4Gbps stacking bandwidth. The stacking capability integrated into this platform is configured as a resilient ring topology designed to provide high reliability and simplified management for higher port density applications.

Combined Ethernet and Power Delivery for Branch Office and Wiring Closet Connectivity

Powerful line rate performance and stackability make this switch ideal for branch offices or the wiring closet of larger offices where power is needed for remote devices. The state-of-the-art QoS capability of this product ensures reliable delivery of advanced network services such as voice while effectively controlling the continually increasing traffic needs found in today's networks.

Easy Access Networking

Featuring an industry standard CLI and Allied Telesis' intuitive yet fully featured Web interface the advanced features of the AT-8000S/48POE are accessible to a wide range of system administrators. The well known CLI and Web interfaces significantly reduce learning time and minimize the cost of deployment.

Secure Management

Only authorized administrators can access the management interface of the 8000S series. Protocols such as SSL, SSH and SNMPv3 facilitate this protection of your network with local or remote connections.

Securing the Network Edge

To ensure the protection of your data, it is important to control access to your network. Protocols such as IEEE 802.1x port-based authentication guarantee that only known users are connected to the network. Unknown users who physically connect can be isolated to a pre-determined part of your network offering guests such benefits as Internet access while ensuring the integrity of your private network data.

Gigabit and Fast Ethernet SFP Support

All switches in the 8000S family support both Gigabit and Fast Ethernet Small Form-factor Pluggables (SFPs). This makes the 8000S series an ideal family for environments where Gigabit fiber switches will be phased-in over time. The 8000S family allows for connectivity to the legacy 100FX hardware until it is upgraded to Gigabit. Support for both speeds of SFPs allows organizations to stay within budget as they migrate to faster technologies.

Key Features

Easy, Well Known Management

- Industry standard CLI
- Simple intuitive, fully featured Allied Telesis Web Interface
- Secure encrypted Web and CLI management with SSHv2 and SSL
- SNMP

Power over Ethernet

- Provides standards based IEEE 802.3af Power over Ethernet to all 48 10/100 ports
- Support for up to 48 class 2 powered devices at 7.3 watts
- Support for up to 24 class 3 powered devices at 15.4 watts

Affordable Truly Stackable 10/100 Switching Platform

- Single IP address stack management.
- 4G resilient ring stacking architecture
- Across stack link aggregation
- Across stack VLAN configuration
- Across stack port mirroring
- Redundant standby stack master

All the QoS Needed in the Wiring Closet for Today's Voice and Data Networking

- Eight priorities assigned to four queues
- IEEE 802.1p for Layer 2 QoS
- DSCP (DiffServ) for Layer 3 QoS
- IEEE 802.1p to DSCP remarking traffic ready for transport to the Layer 3 core of the network

Securing the Network at its Most Vulnerable Point

- IEEE 802.1x and RADIUS network login: *for advanced control of user authentication and accountability*
- Guest VLAN: *to ensure visitors or unauthorized users connect only to services defined by IT e.g. Internet*
- TACACS+: *for ease of management security administration*

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System Configuration

Dimensions (W x D x H)	44cm x 34.7cm x 4.4cm (17.32" x 13.8" x 1.76")
Weight	5.6kg
Mounting	19" rack-mountable hardware included

System Capacity

64MB RAM
16MB flash memory
400Mhz CPU
Up to 4,096 VLAN ID
8,000 MAC address

Performance

Wirespeed switching on all Ethernet ports for all packet sizes

Throughput	13.09Mpps
Switching capacity	17.6Gbps
MTBF	197,009.22 hours

Store and forward mode
Non-blocking switch fabric
Auto MDI/MDI-X

Port speed

10/100TX	RJ-45
10/100/1000T	RJ-45
100FX, 1000SX, 1000LX	SFP slot
RS232	DB9 pin, male port

Internal power supply

Power over Ethernet

Total power budget	465W
For switch	12V/ 90W
PoE budget	50V/ 375W
PoE max supported IEEE 802.3af class 3 devices (15.4W):	24 ports
PoE max supported IEEE 802.3af class 2 devices (7.3W):	48 ports
IEEE 802.af	Power over Ethernet (mode B)

Interface Standards

IEEE 802.3	10T and 10FL
IEEE 802.3u	100TX and 100FX
IEEE 802.3z	1000SX
IEEE 802.3ab	1000T

General Standards

IEEE 802.1D	Bridging
IEEE 802.3x	BackPressure/ flow control

Redundancy Standards

IEEE 802.1D	Spanning-Tree Protocol
IEEE 802.1W	Rapid Spanning-Tree
IEEE 802.1s	Multiple Spanning-Tree
IEEE 802.3ad	LACP link aggregation (with up to eight members per group and up to eight groups per device)

Static port trunk

Quality of Services (QoS)

QoS in Layer 2 (IEEE 802.1p compliant Class of Service)
Traffic prioritization using IEEE 802.1p, ToS, DSCP fields
Map IEEE 802.1p priorities to CoS queues to prioritize traffic at Egress
Strict Scheduling and Weighted Round Robin

VLANs

IEEE 802.1Q VLAN tagging
Up to 256 VLANs
Port-based VLANs
MAC-based VLANs
Private VLANs
GARP VLAN Registration Protocol (GVRP)

Multicast Standards

RFC 1112	IGMP snooping (ver. 1)
RFC 2236	IGMP snooping (ver. 2)
RFC 3376	IGMP snooping (ver. 3)*

*Future release

Management and Monitoring

WEB, CLI, Serial

RFC 1157	SNMPv1/v2c
RFC 2570	SNMPv3
RFC 1213	MIB-II
RFC 1573	Evolution of MIB-II
RFC 1215	TRAP MIB
RFC 1493	Bridge MIB
RFC 2863	Interfaces group MIB
RFC 1643	Ethernet like MIB
RFC 1757	RMON 4 groups: Stats, History, Alarms, Events
RFC 2674	IEEE 802.1Q MIB
RFC 1866	HTML
RFC 2068	HTTP
RFC 854	Telnet
RFC 783	TFTP

IP address allocation
RFC 951/ RFC 1542 BootP/ DHCP
Manual

RFC 2030 SNTP, Simple Network Time Protocol
Syslog event
Dual software images

Stacking
Up to six units
Single chip appearance
Single IP management
Back-up master
Full-duplex link with 2Gbps performance
Trunking across stack
Port mirroring across stack
VLAN across stack

Security

Management security: username and password protection

SSHv2	Telnet management
SSLv3	Web management
RFC 1492	TACACS+
RFC 2138	RADIUS authentication
IEEE 802.1x	Port-based network access control

Guest VLANs

Fault Protection

Broadcast storm control

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Power Characteristics

Voltage input	100-240V AC
Voltage output	48vDC
Current	8A
Heat dissipation	1,587.9 BTU/hour
Clock frequency	166Mhz

Environmental Specifications

Operating temp	0°C to 45°C (32°F to 113°F)
Storage temp	-25°C to 70°C (-13°F to 158°F)
Relative humidity	10% to 90% non-condensing
Storage humidity	5% to 95% non-condensing
Operating altitude	Maximum 3,000m (9,843ft)

Electrical/ Mechanical Approvals

Safety	UL 1950 (UL/cUL), EN60950 (TUV)
EMI	FCC Class A, EN55022 Class A, VCCI Class A, C-Tick, EN61000-3-2, EN61000-3-3
Immunity	EN55024
RoHS compliant	

Package Description

One AT-8000S/48POE switch
Power cord AC
Rack-mount kit
Rubber feet for desktop installation
RS232 management cable
Stacking cable
User guide in CD

Country of Origin

China

Ordering Information

AT-8000/48POE-xx
48 port stackable 10/100TX PoE Layer 2 switch with 2 active SFP bays (unpopulated) and 2 standby 10/100/1000T ports (RJ-45)

Where xx = 10 for US power cord
20 for no power cord
30 for UK power cord
40 for Australian power cord
50 for European power cord

Accessories

Small Form Pluggables (SFPs)

AT-SPFX/2
Multi-mode Fiber, GbE Small Form-factor Pluggable (SFP)

AT-SPFX/15
Single-mode Fiber, GbE Small Form-factor Pluggable (SFP)

AT-SPFX/40
Single-mode Fiber, GbE Small Form-factor Pluggable (SFP)

AT-SPTX
Copper, GbE Small Form-factor Pluggable (SFP)

AT-SPSX
Multi-mode Fiber, GbE Small Form-factor Pluggable (SFP) 850nm

AT-SPLX10
Single-mode Fiber, 10km, GbE SFP, 1310nm

AT-SPLX40
Single-mode Fiber, 40km, GbE SFP, 1310nm

AT-SPLX40/1550
Single-mode Fiber, 40km, GbE SFP, 1550nm

AT-SPZX80
Single-mode Fiber, 80km, GbE SFP, 1550nm

AT-SPZX80/xxxx
Single-mode Fiber, CWDM, 80km GbE SFP

CWDM wavelengths:
Where xxxx = 1470
1490
1510
1530
1550
1570
1590
1610

USA Headquarters | 19800 North Creek Parkway | Suite 200 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895
European Headquarters | Via Motta 24 | 6830 Chiasso | Switzerland | T: +41 91 69769.00 | F: +41 91 69769.11
Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830
www.alliedtelesis.com

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