



## AT-8000S/48POE

### Layer 2 Stackable Fast Ethernet Switch

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48-port stackable 10/100TX POE 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 AT-8000S series. Protocols such as SSL, SSH and SNMP v3 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 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.

#### Key Features

##### Easy, Well Known Management

- Industry Standard CLI
- Simple intuitive, fully featured Allied Telesis Web Interface
- Secure encrypted WEB and CLI management with SSH v2 and SSL
- SNMP

##### Power over Ethernet

- Provides standards based 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.
- 4Gig 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

- 8 Priorities assigned to 4 queues
- 802.1p for Layer 2 QoS
- DSCP (Diffserv) for Layer 3 QoS
- 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

- 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

W x D x H	440mm x 347mm x 44mm (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

Wire speed switching on all Ethernet ports  
14,880pps for 10Mbps Ethernet  
148,800pps for 100Mbps fast Ethernet  
1,448,000pps for 1000Mbps Gigabit Ethernet

Ethernet throughput	6.8Gbps
Chipset switching capacity	17.6Gbps
MTBF	197,009.22 hours
Store and forward mode	
Non blocking switch fabric	
Auto-MDI/MDI-X	

Port speed	
10/100-TX	RJ-45
10/100/1000TX	RJ-45
100-FX, 1000-SX, 1000-LX	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 802.3af class 3 devices (15.4W):	24 ports
POE Max supported 802.3af class 2 devices (7.3W):	48 ports

## Interface Standards

802.3	10Base-T & 10Base-FL
802.3u	100Base-TX & 100base-FX
802.3z	1000base-SX
802.3ab	1000Base-T

## General Standards

802.1d	Bridging
802.3x	BackPressure/ Flow Control

## Redundancy Standards

802.1D	Spanning Tree Protocol
802.1W	Rapid Spanning Tree
802.1s	Multiple Spanning Tree
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 (802.1p compliant Class of Service)  
Traffic prioritization using 802.1p, ToS, DSCP fields  
Map 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 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	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 SNMP, Simple Network Time Protocol  
Syslog Event  
Dual Software Images

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

## Security

Management Security: user name 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- 240VAC  
Voltage Output 48VDC  
Current 1.5A  
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  
Rackmount kit  
Rubber feet for desktop installation  
RS232 management cable  
Stacking cable  
User guide in CD  
Limited Lifetime warranty card

## Country of Origin

China

## Ordering Information

### AT-8000/48POE-xx

48-port stackable 10/100TX POE L2 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

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](http://www.alliedtelesis.com)

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