



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

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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

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