



AT-8000S/24 Layer 2 Stackable Fast Ethernet Switch

AT-8000S/24

24-port stackable 10/100TX L2 switch with 2 active SFP bays (unpopulated) and 2 standby 10/100/1000T ports(RJ-45)

Overview

Allied Telesis 의 AT- 8000S/24 는 기존 플랫폼에 L2 스위칭 기능을 저렴한 비용으로 제공하는 스택형 스위치입니다.

AT- 8000S/24 는 24 개의 10/100 포트, 2 개의 고정 1Gbps SFP 슬롯과 스택 대역을 총 4Gbps 로 전달하는 2 개의 통합 스택 컨버터를 갖추고 있습니다. 기존 플랫폼에 통합되는 스택 기능은 탄력적으로 네트워크를 연결하는 링토폴로지로 구성 되어있어, 높은 신뢰성을 보장하여, 24 개 포트를 간단하게 관리할 수 있습니다.

Ideal Branch Office and Wiring Closet Connectivity

AT- 8000S/24 는 최상의 성능과 스택 기능으로, 지사나 대기업의 wiring closet 에 적합한 서비스를 제공 합니다. 이 스위치의 최신 QoS 기능은 트래픽을 탄력적으로 증가 시켜 효과적으로 조절함으로써, 음성 서비스와 같이 신속한 전송이 필요한 최신 네트워크 서비스의 신뢰성을 높여줍니다.

Easy Access Networking

AT- 8000S/24 는 산업표준 CLI 와 웹인터페이스 같이 최신의 성능을 갖추고 있습니다. 이는 시스템 관리자가 다양한 곳에서 접근할 수 있도록 하여 편리하게 제품을 관리 할 수 있습니다.

Secure Management

SSL, SSH, SNMP v3 의 프로토콜은 오직 허가 받은 관리자만이 8000S 시리즈 관리 인터페이스에 접근할 수 있으므로, 로컬 및 원거리에서 접속 할 경우 네트워크를 철저 하게 보호 합니다.

Securing the Network Edge

네트워크 접속을 관리하는 것은 데이터 보안을 강화하기 위해서 매우 중요하므로, 802.1x 인증을 받은 프로토콜은 허가받은 사용자에게만 네트워크 접속을 허용하고, 불법 침입자들에게는 인터넷 사용만을 허용할 뿐, 사내 시스템에 접근하지 못하게 함으로써, 네트워크 데이터를 완벽하게 보호 합니다.

Key Features

Easy, Well Known Management

- Industry Standard CLI
- Simple intuitive, full features Allied Telesis Web Interface
- Secure encrypted WEB and CLI management with SSH v2 and SSL
- SNMP
- Two level access privileges

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

- 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
- Layer 2 and Layer 3 ACL

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
- Layer 2 and 3 ACL
- Port MAC address security options



System Configuration

Dimensions	44cm x 25.7cm x 4.3cm
(W x D x H)	(17.3" x 10.1" x 1.7")
Weight	3.15kg (6.94lb)
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	
Packet buffer memory	1Mbit

Performance

Wirespeed switching on all Ethernet ports for all packet sizes

Throughput	9.52Mpps
Switching capacity	12.8Gbps
MTBF	233,997 hours in standalone operation 221,210 hours in stacked operation (up to 6) with no free space between switches

MTBF figures apply to fanless model (v2) introduced 2009

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

Latency

10Mbit	85.39 µsec
100Mbit	17.49 µsec
1000Mbit	2.72 µsec

Port speed

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

Interface Standards

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

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
BPDU guard	1
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)
RFC 3376	IGMP querier

Option to forward/filtering of unregistered MC frames 1

IPv6

IPv6 QoS
IPv6 ACL
IPv6 Host
RFC 2461 IPv6 neighbor discovery
RFC 2463 ICMPv6: Internet Control Message Protocol version 6
RFC 1981 Path MTU discovery
Dual-stack IPv4/IPv6 protocol
IPv6 Tunnelling over IPv4
IPv6 Network management
IPv6 Applications: WEB/SSL
Telnet server/SSH, AAA/Radius, Management
ACLs, SNMP, PING, TFTP/Copy, Syslogm (9,843ft)

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 2819 RMON 4 groups
RFC 2674 IEEE 802.1Q MIB
RFC 1866 HTML
RFC 2068 HTTP
RFC 854 Telnet
RFC 783 TFTP
LLDP1
IEEE 802.1ab
LLDP-MED1
IP address allocation
RFC 951/ RFC 1542 BootP/ DHCP
DHCP snooping
Manual
RFC 2030 SNTP, Simple Network Time Protocol
Syslog event
Dual software images

Stacking

Up to six units
Single system appearance
Single IP management
Backup master
Full-duplex link with 2Gbps performance
Link aggregation/trunking across stack
Port mirroring across stack
VLAN across stack

Security

Management security: username and password protection
SSHv2 for Telnet management
SSLv3 for Web management
RFC 1492 TACACS+
RFC 2138 RADIUS authentication
IEEE 802.1x Port-based network access control
IEEE 802.1x Dynamic VLAN1
IEEE 802.1x RADIUS accounting1
IEEE 802.1x Multi-session mode1
IEEE 802.1x Action on violation1
IEEE 802.1x Single-host violation1
IEEE 802.1x Guest VLAN timeout1
IEEE 802.1x Authentication not-required1
Security login banner1
Guest VLANs
RFC 2865 IEEE 802.1x port-based network access control
MAC-based network access control
ACL - Access Control Lists

Fault Protection

Broadcast storm control

Power Characteristics

Voltage input 100-240V AC
Voltage output 12vDC
Current 1.5A
Power consumption 26.5W2
Power supply efficiency 78.46%
Heat dissipation 184.41 BTU/hour
Clock frequency 166MHz
Acoustic noise 14.9dB

Environmental Specifications

Operating temp 0°C to 40°C (32°F to 104°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/24 switch
Power cord AC
Rack-mount kit
Rubber feet for desktop installation
RS232 management cable
Stacking cable
Install guide and user guide in CD and at www.alliedtelesis.com

Country of Origin

China

Ordering Information

AT-8000S/24-xx
24 port stackable 10/100TX 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, 2km, 100FX, SFP, 1310nm

AT-SPFX/15

Single-mode fiber, 15km, 100FX, SFP, 1310nm

AT-SPFX/40

Single-mode fiber, 40km, 100FX, SFP, 1310nm

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-SPBD10-13

Single-mode fiber, 10km, GbE SFP, 1310/1490nm,
LC-BiDi

AT-SPBD10-14

Single-mode fiber, 10km, GbE SFP, 1490/1310nm,
LC-BiDi