Allied Telesis®

AT-9724TS
Managed Layer 3 Stackable Gigabit Ethernet Switch

AT-9724TS
24 port 10/100/1000TX stackable Layer 3+ Gigabit Ethernet switch + 4 SFP Combo

Performance
The AT-9724TS is an advanced Layer 3 switch designed to meet the requirements of multimedia and bring traffic control and high performance to the edge of the network. With IP routing capabilities for investment protection and flexible management, the AT-9724TS is designed to be a cost effective solution for today's market with the ability to expand as network demands grow.

Specially designed for high-performance desktop edge connectivity, workgroup, midsized networks, campus and metro access edge, the AT-9724TS provides Layer 3 functionality to support converged services like voice and video, which are becoming more and more integrated into data networks. When stacked, up to 288 ports of Gigabit Ethernet can be achieved, providing enough performance for medium enterprises, multi-unit buildings, hospitals, schools, and colleges.

Utilizing a powerful switch fabric, the AT-9724TS passes traffic reliably and efficiently with wirespeed performance and non-blocking architecture. The integrated stacking modules pass data packets at an impressive backplane speed of 40Gbps.

Rich Feature Set
A rich set of features is incorporated into the AT-9724TS to provide full support for multimedia Layer 3 applications. All switches include advanced features to provide QoS/Cos, VLAN and Security, including 8 priority queues for 802.1p/ToS/Diffserv. Layer 3 routing features include: RIPv1/v2, OSPFv2, PIM-DM, PIM-SM, DVMRP and VRRP. Security features include MAC-address,IP-address, or TCP/UDP-based Access Control Lists; 802.1x MAC-based

authentication and 802.1x Port-based authentication. VLAN support includes port-based VLANS(up to 255 static groups per device) GARP/GVRP, and 802.1q.

Stackability
Up to 12 Switches can be stacked together for Ring mode. Users can add units to reach maximum 288 GbE ports per Ring stack. Switches are stacked together through dedicated 2 × 10G ports with high-speed stack cables for a total of 40Gbps that provide high speed of multiple Gigabit connections, allowing the entire stack to perform as a single IP entity. Users can see the number of switches stacked together from seven-segment display on the unit's front panel.

Scalability
Each switch supports four optional SFP connectors, which allow the switched network to be extended with fiber optic cabling. In turn, the 10Gbps stacking interfaces support flexibility and long-term network growth.

Management & Availability
The AT-9724TS has an integrated management agent, which provides an embedded web server, SNMP, RMON, console telnet capabilities.

The AT-9724TS supports stacking of up to 12 units in a highly resilient ring-architecture via integrated rear 10-Gbps stacking ports. Additional protection from down-time comes in the form of an optional redundant power supply, 802.3ad Link Aggregation, 802.1d Spanning Tree, 802.1w Rapid Spanning Tree and 802.1s Multiple Spanning Tree.

Key Features

Stack Up to 288 Ports
- 40Gbps dedicated stack ports (2 × 10Gbps ports)

88Gbps Switching Fabric, 65.5Mpps
- Wirespeed Layer 2 to 3 filtering
- Wirespeed Layer 2 switching
- Wirespeed Layer 3 IP routing

Flexible, Modular Design
- 4 SFP bays for fiber media
- 1RU Form Factor

Advanced Performance Features
- Full QoS for multimedia applications
- Eight Priority Queues Per Port
- GVRP VLAN Support
- Supports up to 4000 VLANs
- Jumbo Frames up to 9000 bytes
- IEEE 802.1s Multiple Spanning Tree Support
- IEEE 802.3ad link aggregation (LACP)

Routing
- IEEE RIP v1/v2
- OSPF
- IGMPv1 and IGMPv2

Management
- SNMP Support
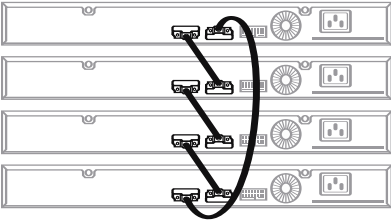- RMON Support
- Port Mirroring

Security
- Port Security
- SSH
- SSL
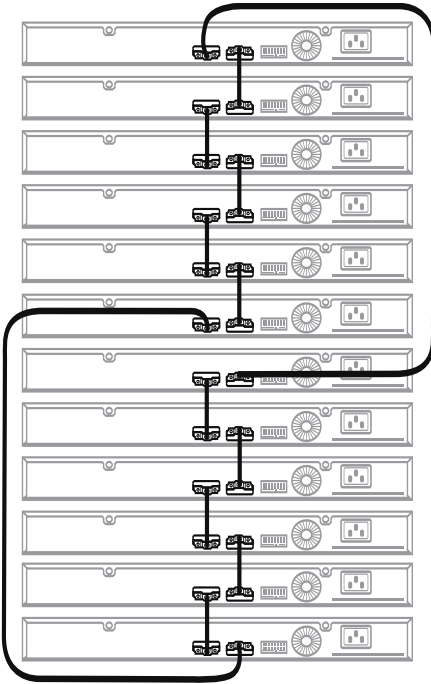- TACACS/TACACS+
- RADIUS Authentication
- Access Control Lists

Assurance
- Redundant Power Supply Option
- Two Year Warranty
- Resilient Ring Stacking
- 802.3ad (LACP)
- 802.1s (MSTP)
- 802.1w (RSTP)

Small Stack Cable Configuration

Large Stack Cable Configuration

Specifications
Performance
88Gbps switching fabric, 65.5Mpps forwarding rate
14,880pps for 10Mbps Ethernet
148,800pps for 100Mbps Ethernet
1,488,000pps for 1000Mbps Ethernet
MAC addresses 16,000
Buffer Memory 2MB
SDRAM Memory 256MB
Flash Memory 16MB

VLANs
4,000 VLANs (256 Dynamic)
Auto-negotiation speed
Auto-MDI/MDI-X
Trunk groups: Up to 32 groups, up to 8 ports each group
L3 Host IP Table up to 3,000 entries
IP Multicast Table support 256 IP multicast table
IEEE 802.1Q support
GARP/GVRP
Number of Static VLANs supported per device
Static + dynamic =4096
Max. dynamic VLAN = 255
Max. static VLAN = 4096

Reliability
MTBF
AT-9724TS 175,283 hours

Interface Connections
10/100/1000T Shielded RJ45
SFP bays for Fiber connections

Network Management
SNMP
Web-based management
RS232 console access
Command Menu Interface
Telnet

Physical Characteristics
Height: 4.4cm (1.7")
Width: 44cm (17.3")
Depth: 21.0cm (8.5")
Weight: 3.2Kg
Mounting: 19" rackmountable, hardware incl.

Standards & Compliance
IEEE 802.3 10T Ethernet
IEEE 802.3u 100TX Ethernet
IEEE 802.3ab 1000T Ethernet
IEEE 802.3z 1000X Ethernet
IEEE 802.3ad Link Aggregation
IEEE 802.1d Spanning Tree
IEEE 802.1p Class of Service, priority protocols
IEEE 802.1Q VLAN Tagging
IEEE 802.3x Flow Control
RFC 1112 IGMP Snooping v1
RFC 2236 IGMP Snooping v2
RFC 951 BootP
RFC 2131 DHCP
RFC 1350 TFTP
RFC 1757 RMON Groups 1, 2, 3 and 9
TACACS+
RADIUS
RIPv1 & v2
RFC 1850 OSPF
VRRP
DVMRP
PIM Dense Mode
PIM Sparse Mode
IGMPv2
GARP/GVRP

SNMP Standards
SNMP v1 Support
SNMP v2c Support
SNMP v3 Support
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network MIB
RFC 1643 Ether-like MIB
RFC2233 Interface MIB
Private MIB

Electrical/Mechanical
Power Consumption: 90W
Power Characteristics:
      Voltage: 100-240V AC auto-ranging
      Frequency: 50-60Hz

Environmental Specifications
Operating Temp 0°C – 40°C (32°F – 104°F)
Storage Temp -25°C – 55°C
Relative Humidity Range 5% – 95% non-condensing

Approvals
UL 1950
FCC Class A
CSA 22.2 No. 950
EN55022 Class A
EN 60950 (TUV)
EN50082-1
CE

Country of Origin
Taiwan

Summary of Features

COS
Classification based on IEEE 802.1p priority
Classification based on MAC SA/DA
Number of priority queues supported
Classification based on ToS priority
Classification based on IP destination address
Classification based on TCP/UDP destination port number
Classification based on DSCP

Spanning Tree Support

IEEE 802.1D Spanning Tree compatible
IEEE 802.1w Rapid Spanning Tree support
IEEE 802.1S Multiple Spanning Tree support

IP Multicast

IGMP Snooping
IGMP v1/v2
DVMRP
PIM Sparse Mode Support
PIM Dense Mode Support

Configuration

Telnet Server
TFTP Client
BootP Client
DHCP Client
DHCP Relay agent
BootP Relay
DNS Relay

Management

Password Enabled
Web-based Support
TACACS+ Authentication
RADIUS Authentication
TFTP Upgrade
Command Line Interface (CLI)
Traffic Segmentation
Bandwidth Control (1Mbps increments)
Support SYSLOG
Support Port Security
Web GUI Traffic Monitoring
Web MAC Address Browsing
SNTP Support
Single IP Management
Port Description
CPU Utilization Monitoring
Dual Images Support
SNMP Trap on MAC address Notification

MIB Support

RFC 1213 MIB II
RFC 1493 Bridge
RFC 1757 RMON
RFC 1643 Ether-like MIB
Private MIB
IEEE 802.1p RFC 2674

IF MIB
RFC 2233 Interface MIB
IGMP MIB
RIP MIB
OSPF V2 MIB
CIDR MIB RFC2096
RFC 2096 IP Forwarding Table MIB

RMON

4 Groups of RMON (Statistics, History, Alarms, Events)
RMON 1,2,3,9

Port Configuration & Monitoring

Auto-Negotiation Support
Port Mirroring
Support Broadcast Storm Control

Port Trunking

Support Static Mode Trunking

IEEE 802.3ad

802.3ad Link Aggregation (LACP)

Security

RADIUS Client
Support IEEE 802.1x Port-based Access Control
Support IEEE 802.1x MAC-based Access Control
SSH
TACACS/TACACS+
SSL
Support Cisco-like Port Security
Access Control List Support (ACL):
- 8 Profiles
- 50 Rules
Based on MAC Address
Based on VLAN
Based on IP Address
Based on Protocol Type
Based on TCP/UDP Port Number
Based on IEEE 802.1p
Based on DSCP
Based on Port
Based on TCP/UDP Payload

Stacking Function

Ring Stacking with up to 12 AT-9724TS through 2 stacking ports in the rear providing 40Gbps stacking bandwidth
Management Support

Routing –IP

RIPv1 & v2
OSPF Support
IP v4 Support
IP Fragmentation Support
IP Multi-netting
Floating Static Route
VRRP

Ordering Information

AT-9724TS-20
24 port 10/100/1000TX Stackable Layer 3+ Gigabit Ethernet switch + 4 SFP Combo

With:
- Three power cords (US, UK, European)
- Stacking cable.
- Two year warranty

AT-RPS9700-xx
2-slot Redundant PSU Frame for AT-9700 Series

AT-PWR9700-xx
PSU modules for AT-RPS9700 (max 2)

AT-SPSX
Multimode Fiber, GbE Small Form Factor Pluggable (SFP), 500m, 850nm

AT-SPLX10
Singlemode Fiber, GbE Small Form Factor Pluggable (SFP), 10km, 1310nm

AT-SPSLX40
Singlemode Fiber, GbE Small Form Factor Pluggable (SFP), 40km, 1310nm

AT-SPLX40/1550
Singlemode Fiber, GbE Small Form Factor Pluggable (SFP), 40km, 1550nm

AT-SPZX80/xxxx
Singlemode Fiber, GbE Small Form Factor Pluggable (SFP), 80km, 1550nm

Connecting The IP World

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