

Atrie S3026G Stack Switch

Atrie S3026G stack switch is a desk stackable two-layer Ethernet switch product with high performance, and it is researched and developed independently for the enterprise center LAN, IP MAN housing estate access and desk access of high port density requirement. This switch can realize the wire-speed forwarding of layer-2 data frames and has perfect functions of QoS and multicast. Its powerful stacking function reduces the requirement of IP address for network construction and the unified management of a master switch simplifies network management. Simultaneously, it can expand its port density rapidly, which gives much convenience for network construction and wiring. As a slave stack device, Atrie S3026G slave switch need not CPU card, thus reduces the cost of stack system. It can, in enterprise network, satisfy the special requirements such as video, audio, data with high priority and other given data and can gather data that need be forwarded to the core network and transmit it to the core network. Cooperating with other Atrie switches and routers, Atrie S3026G can provide solution with low cast, high-performance, powerful expandability and simple management for the network construction of enterprise network, education network and IP MAN etc.



Atrie S3026G Appearance

Product Configuration:

Product model	10/100M Ethernet port	Expansion slots	Configuration of serial port	Configuration of Ethernet ports
Atrie S3026G	24	2	1	1

Optional Modules:

<p>SM30-1FGM gigabit multimode optical fiber module SM30-1FGS gigabit single mode optical fiber module SM30-1TG gigabit electric module SM30-1SC single port stacked module SM30-1T hundred billion electric module SM30-1FM hundred billion multimode electric module SM30-1FS hundred billion single mode electric module *SM30-1FGA gigabit optical fiber card (working with GBIC module)</p>

- *SM30-1TGA gigabit electric module
- *SM30-1SCA single port stacked module
- *SM30-1TA hundred million electric module
- *SM30-1FMA hundred million multimode optical fiber module
- *SM30-1FSA hundred million single mode optical fiber module
- *GBIC-S single mode GBIC module
- *GBIC-M multimode GBIC module

Key Features

High-speed, high-reliability
Powerful stacking function
Support for VLANs
Port speed limitation
Support for 802.1X authentication
Support for port MAC address binding
Link Aggregation
Support for Multicast
Self-adapting, simple disposition
Support for QoS mechanism
Powerful personalized network management
Network security
Visual and abundant indicator lights
Software download

High-speed, high-reliability

With its backboard bandwidth being up to 12.8G, Atrie S3026 adopts store-and-forwarding mechanism to distribute independent bandwidth for each port and supports 802.3x flow control mode under full duplex and back-pressure flow control mode under half duplex; and its all ports support layer-2 full wire-speed forwarding. It provides 2 expansion slots. And it can select single-port 100M single mode/multimode optical fiber interface, or single-port 100M electric interface to satisfy the requirement, with agile expansion, of high-speed application and of convenient connection with remote networks. The expansion module supports hot-swap, which gives much convenience and flexibility for addition/remove of modules.

Powerful stacking function

This function reduces the requirement of IP addresses for network construction and only one IP address is needed for switch devices in the same stack system. Multiple switches of the stack system increase the network bandwidth. Simultaneously, compared with the management of multiple separate switches, the stack system can, through the unified management of a master switch, simplify the whole network management. With this function, up to 8 Atrie S3026Gs can be stacked and those slave stack devices need no CPU card. Thereby, it can expand ports rapidly and much investment of users can be saved.

Support for VLANs

It supports IEEE 802.1Q protocol standards and the dynamic registration VLAN of *IEEE 802.1Q

GVRP. Each device can advance LAN performance by dividing VLANs, so as to achieve data security of higher level. This ensures that packets can be only transferred to workstations of a given VLAN, and creates isolated conflict domains between network port groups, yet reduces broadcast transmission. The number of VLANs that Atrie S3026 switch supports can satisfy the requirement of large-size network for data isolation.

Supports port speed-limit with 312K granularity

Setting threshold level of speed-limit can control the data transmission speed of any port. 8 speed-control levels can be set according to whether the port works in 10M or 100M. For example, the port can be controlled according to 312K, 625K, and 938K granularities when it works in 10M, which can satisfy the requirement of users for special application of the port working speed.

Port MAC address binding

It supports multiple-MAC-address binding on a port. This controls user access effectively and then avoids the fall, caused by unauthorized users accessing the network, of the network security.

Link Aggregation

It supports IEEE802.3ad link aggregation, and provides 8 groups of link aggregation two same gigabit cards inserted in two expansion slots can compose a aggregation link with up to 4G bandwidth, each group containing 2, 4 or 8 optional ports. This can provide the lowest-cost solution for the users whose devices have redundant ports and who wish to advance their network bandwidth. By Link Aggregation, high-speed channel can be achieved between switches or between a switch and a server, and network bottleneck can be broken through. Simultaneously redundant backup can be also provided for network.

Support for Multicast

Atrie S3026 supports IGMP SNOOPING of layer-2 multicast protocol, and can perfectly achieve packet switching in the multicast environment. It can support up to 32 multicast groups to satisfy the application requirement of multimedia service in the network.

Port self-adapting, simple disposition for usage

For each port, its auto-negotiation function can select half duplex/full duplex transmission mode automatically; and its self-check ability can check the speed of all devices connected with it. Each port can be automatically configured for operation of 10M/100Mbps so that its bandwidth can be optimized and wire-order of network wires can be checked. In addition, both direct cable and cross cable(MDI/MDIX) can be used directly, there by, this reduces many of the complex works for network maintainer to make wires.

QoS

It supports both mapping between IEEE802.1p priorities and port queue ones and classification service that bases on IP ToS and multi-layer CoS, providing an optimized forwarding

performance. Besides that, it supports protection mechanism against HOL blocking so that port blocking can be avoided or relieved. On the hardware, each 10/100M port supports 4 output queues with priorities, and manages multiple types of traffic differently. This ensures that packets with higher priority should be first forwarded and that network bandwidth can be utilized in reason so as to make network run in optimized state. The strict priority sequence can assure packets with the highest priority can acquire services firstly, without any fall of network performance.

Powerful and personalized network management

It supports multiple kinds of management modes such as SHELL, TELNET, WEB, SNMP, and cluster management etc. The personalized man-machine interface enables the network manager to make easy operation, without more special learning, and realize large-scale network management across platforms. Through the standard Web browser, the built-in Web-based management software provides the convenient Web-based management interface. Simultaneously, the support for English/Chinese interface accommodates network engineers with different habits. The support for SNMP v1/v2 and TNELNET interface provides comprehensive in-band management, and the CLI-based management platform provides detailed out-band management. In addition, the network management software, Atrie MasterPlan, can also provide a general management interface for Atrie routers and switches. The powerful cluster management technology (adopting the management software, DeviceMaster) can utilize one IP address to realize the unified management of multiple switches. The built-in remote monitor (RMON) software agent supports 4 RMON groups (history, statistics, alarm and event), and improves the management, monitoring and analysis of traffic.

User Access Authentication

It supports the advanced IEEE 802.1X access-controlled standard and can bind user name, MAC address and IP address. Combined with the special Atrie technologies and the Atrie NetSmart system, this can realize AAA function, which provides a whole solution to controlled access for users.

Network Security

Atrie S3026 provides a serial of solutions to network security: only authenticated computers can, through management authentication, manage and maintain devices; hierarchical network management assigns different authorities to network managers with different levels; view of port MAC address learning state can make network managers know of the situation of user access; the working state of ports can be monitored and ports can be enabled/disabled; the threshold ratio of broadcast data can be limited and broadcast storm can be filtered; port mirroring can be supported and packets on the selected switch port can be monitored; the function of access control can be used to control data flow via resource/destination MAC address and application of port number; hardware processing modes can ensure wire-speed filtering.

Software download, abundant indicator light

TFTP (Trivial File Transfer Protocol) can decrease the cost of maintenance and management through downloading of update software from a focus place. Each port has multiple LEDs to show port state and receiving/sending data state. Additionally, 10BaseT/100BaseT indicator lights and switch state LEDs are used to show the state of system, redundant power, etc. All these, thereby, provide a comprehensive, convenient and visual indicator system, which makes maintenance and fault diagnosis convenient.

Technology specifications

Model	Atrie S3026G
Item	
Port FE/GE	24Fast Ethernet (10/100)+2Giga Ethernet (10/100/1000) Mbps
Switching architecture	Store-and-forwarding: Auto negotiation for speed and duplexity.
Backboard bandwidth	12.8G
VLAN mode (port/protocol)	Port-based VLAN
VLAN number and range	128 VLANs
Isolation mode between ports	Adopting VLAN partition for isolation
MAC Address table	8K
Quantity of MAC addresses supported by each port	8K
Packet Transmitting rate	8Mpps
Dimension (L*W*H,mm)	444 X 319 X 44.5
Protocol and standard	IEEE 802.3, 802.3u, 802.3z, 802.3x, 802.3ad, 802.1d 802.1x, 802.1w STP, RSTP, 802.1p, 802.1Q VLAN, IGMP SNOOPING, SNMP v1/v2, MIB II, Four groups of RMON
Support for spanning-tree	Support STP/RSTP
Port mirroring	Support
Quantity of ports contained in each group aggregation	2/4/8 ports
Port binding with MAC address	Support
Port rate-limit	Support for 8 levels of port rate-limit under 10M/100M environment: 312K/3.12M, 625K/6.25M, 938K/9.38M, 1.25M/12.5M, 2M/20M, 4M/40M, 6M/60M, 8M/80M
Power-off auto recovery	Support
Power-off MAC address memory	Support
Full/half-duplex on	Support

port	
Network Timing Protocol	Support
Multicast	Support
MAC address expiration configuration range	1S~100000S
Fan/power	2 /1w
Power W	<25W
Working voltage (AC/DC)	AC 90V~265V 50~60 Hz (DC -36V,-60V)
Network management and protocols local, TELNET and WEB etc.	Support for SHELL (CLI), TELNET, WEB, SNMP and cluster management
Working environment	Temperature:0 to 50 humidity 5 95% non-condensing
Anti-static, lightning protection	Support
Mean time between faults (MTBF)	80,000 hours



ATRIE TECHNOLOGY INC.

10F, 14, Lane 609 Sec. 5 Chung Hsin Rd.,
San Chung City, Taipei Hsien, Taiwan, 241, R.O.C.

Tel: 886-2-2999-5155 Fax: 886-2-2999-4960

E-mail: contacts@mail.atr.ie.com.tw

[http:// www.atr.ie.com.tw](http://www.atr.ie.com.tw)



- Product specifications are subject to change without notice.
- Please contact your dealer for option availability.
- All brand names are registered trademarks of their respective owners.