

Product Specification

A-GEAR S2448

Hi-performance Gigabit Ethernet Switch



As the newest S2000 Series switch proudly presented by A-GEAR Tech Co., Ltd, A-GEAR S2448 is the next-generation hi-performance L2 Ethernet switch with 48 Fast Ethernet ports. It has advanced architecture, 36 Gbps switch fabric, and 13.1 Mpps forwarding rate. Its hardware wire-speed switching capability provides a powerful, multi-layer solution not only for enterprises, but also for Internet Service Providers (ISP's) and telecom carriers. A-GEAR S2448 has a sub model, A-GEAR S2448-DC.

Application

- Multi-layer, hi-performance switching platform for enterprises, ISP's and telecom carriers.

Features

Performance

- 36Gbps switch fabric, wire-speed forwarding rate: 13.1 Mpps
- High port density. 48 Fast Ethernet ports, 4 Gigabit ports
- 80-km transfer by Gigabit optical fiber, direct connection to WAN

Security and reliability

- IEEE 802.1 x
- Powerful ACL supports L2-L7 data filtering
- Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'
- RPS power hot standby
- QinQ support. Double VLAN security

Easy maintenance

- Automatic recognition for straight-through or cross-over cables

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- Stackable physically and through cluster technology. Central management with unified IP address saves IP addresses
- Management via CONSOLE port, Web, SNMP, Telnet, etc.
- Support (A-GEAR) Broad Director, HP Open View, Cisco Works 2000

Traffic and broadcast control

- Auto-detection and restraining of broadcast storm, IGMP snooping, effectively restrict broadcast flooding
- Full- and half- duplex traffic control
- Ethernet port rate limiting with 64 K step size
- QoS support
- Jumbo frame

Specifications

Processor	RISC 300 MHz
FLASH	8 MB
Memory	128 MB (up to 512 MB)
Port & Slot	48 * 10/100M TX 2 * 100/1000M Slots (support up to 4 Gigabit Ports) 1 * Console Port
Switch Fabric	36 Gbps
Forwarding Rate	13.1 Mpps
Switching Mode	Store-and-forward
MAC Address Table Size	16 K
Queuing Buffer	64 MB
Jumbo frame	16383
802.1Q VLAN	1 ~ 4094, partition at will
Dimensions (L x W x H) (mm)	442 x 316 x 44
Power Consumption	60 W (max.)
Power Input	AC 100 ~ 240 V, 47 ~ 63 Hz, 1A/230V, RPS power hot standby
Stacking	Hardware stack upto 16 , software stack upto 32
LED Indicators	Power, system, link, activity, 10/100M
Temperature	Operating: 0 ~ 50°C, non-operating: -40 ~ 70°C
Humidity	0 ~ 90% (no condensing)
Functions	
Spanning Tree	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE802.1s MSTP, PVST
VLAN	Port-based VLAN, 802.1Q tag VLAN, Private VLAN, GVRP dynamic VLAN configuration

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Traffic Control	Back pressure at half-duplex, 802.3x at full-duplex, CAR support, 64 K step size
Broadcast Control	Stop sending at threshold to restrict broadcast storms
Multicast Control	IGMP snooping
Port Trunking	Up to 8 groups with up to 32 ports per group, dynamic LACP or static aggregation
Port Mirroring	Supported. Can be based on flow classification
Clustering	Up to 256, manageable through single IP
Security	IEEE 802.1x port-based user authentication QinQ double VLAN security Port Security Hardware support for IP ACL, MAC ACL, VLAN ACL Port-based user authentication by combinations and bandings of port, IP address, and MAC address Remote authentication through RADIUS User privilege classification and password protection DHCP-snooping, IP Source Guard, ARP inspection
QoS	Head Of Line (HOL) blocking prevention mechanism 4 dispatching queues per port, mapping the 8 priority queues in 802.1p WRED, WFQ, SP, and FIFO queuing algorithms Best Effort Service Differentiated Service Strict Priority Weighted Round Robin First Come First Serve TOS re-tagging RTS Ether-ring (Fast ring topology protection)
Network Management	SNMP v1/v2 RMON (Group 1, 2, 3, 9) Telnet Command Line Interface (CLI) Web interface Support A-GEAR network management tools suite: Broad Director NTP SSH LLDP
Software Upgrade	TFTP
Configuration Upload/download	TFTP



Order Information

A-GEAR S2448

Stackable Ethernet switch with 48 10/100M Fast Ethernet ports,
2 expansion slots supporting up to 4 Gigabit ports, 1 CONSOLE, and
standard AC power supply

The functions and corresponding parameters may change in light of the upgrade of software, modular, etc. The right of final interpretation belongs to A-GEAR. For more information, please contact us.