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Product Specification
A-GEAR S2448C
Hi-performance Gigabit Ethernet Switch

As the newest S2000 Series switch proudly presented by A-GEAR Tech Co., Ltd, A-GEAR S2448C is the next-generation hi-performance L2 Ethernet switch with 48 Fast Ethernet ports, plus 4 gigabit ports. It has advanced architecture, 36Gbps 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.

Application

- Enhanced L2, 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, 2 Gigabit Ethernet ports, 2 Gigabit SFP slots
- 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'
- QinQ support. Double VLAN security

Easy maintenance

- Automatic recognition for straight-through or cross-over cables
- Stackable physically and through cluster technology. Central management with unified IP address saves IP addresses

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- 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/multicast/DLF storm, IGMP snooping, effectively restrict broadcast flooding
- Full- and half- duplex traffic control
- Ethernet port rate limiting at 1M step size
- QoS support
- Jumbo frame

Specifications

Processor	MPC 50MHz
FLASH	4 MB
Memory	64 MB
Port & Slot	48 * 10/100M TX 2 * 10/100/1000M TX 2 * GSFP slots 1 * Console Port
Switch Fabric	36 Gbps
Forwarding Rate	13.1 Mpps
Switching Mode	Store-and-forward
MAC Address Table Size	8 K
L2 multicast groups Table	4 K
Queuing Buffer	64 MB
Jumbo frame	2K
802.1Q VLAN	1 ~ 4094, partition at will
Dimensions (L χ W x H)	442 mm χ 385 mm χ 44 mm
Power Consumption	40 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℃, non-operating: -40 ~ 70℃
Humidity	0 ~ 90% (no condensing)
Functions	
Spanning Tree	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
VLAN	Port-based VLAN, 802.1Q tag VLAN, Super 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, 1M step size at 100M ports and 8M step size at 1000M ports
Storm Control	Broadcast, multicast, DLF
L2 Multicast	IGMP snooping
Port Trunking	Up to 6 groups with up to 8 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, static max.16 MAC addresses per port, dynamic max. 8K MAC address per port Hardware support for IP ACL, MAC 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
QoS	Head Of Line (HOL) blocking prevention mechanism 4 dispatching queues per port, mapping the 8 priority queues in 802.1p WRR, WRR+SP(hybrid 1), and FIFO queuing algorithms Best Effort Service Differentiated Service Strict Priority Weighted Round Robin First Come First Serve TOS re-tagging RTS
DHCP	DHCP snooping, DHCP option 82
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/FTP
Configuration Upload/ download	TFTP/FTP

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Order Information

A-GEAR S2448C	Stackable Ethernet switch with 48 10/100M Fast Ethernet ports, 2 10/100/1000M Ethernet ports, 2 Gigabit SFP slots, 1 Console Port, 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.