

# Product Specification

## A-GEAR S3448

### Hi-performance Gigabit Ethernet Switch



As the newest S3400 switch proudly presented by SA-GEAR Tech Co., Ltd, A-GEAR S3448 is the next-generation hi-performance L3 Ethernet switch. It has advanced architecture, 36 Gbps switch fabric, and 13.1Mpps L3 forwarding rate. Its hardware wire-speed L3 switching capability provides a powerful, multi-layered solution not only for enterprises, but also for Internet Service Providers (ISPs) and telecom carriers.

#### 1. Features

##### 1.1. Performance

- 36 Gbps switch fabric, hardware routing, wire-speed L3 forwarding rate: 13.1Mpps
- High port density. 48 100M Fast Ethernet ports and up to 4 Gigabit ports
- 80-km transfer by Gigabit optical fiber, direct connection to WAN

##### 1.2. Security and reliability

- IEEE 802.1x and HTTP user authentication
- Powerful ACL supports L2-L7 data filtering
- Intelligent forwarding, complete defense against viruses like 'Code Red' or 'Blaster'
- RPS power hot standby
- QinQ double VLAN security

##### 1.3. 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.
- Management via CONSOLE port, Web, SNMP, Telnet, etc.
- Support (A-GEAR) Broad Director, HP Open View, Cisco Works 2000

#### 1.4. Traffic and broadcast control

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

#### 1.5. Routing protocols

- Static routing
- Support RIP v1/v2, OSPF v2, BEIGRP, BGP v4 and many other dynamic routing protocols
- Support PIM-SM/DM, DVMRP and many other multicast routing protocols

## 2. Specifications

	<b>S3448</b>
Processor	RISC 300 MHz
FLASH	8 MB
Memory	128 MB (up to 512 MB)
Port & Slot	48 10/100M TX 2 100/1000M Slots 1 Console Port
Switch Fabric	36Gbps
L3 Forwarding Rate	13.1 Mpps, all wire-speed, with filtering
Switching Mode	Store-and-forward
MAC Address Table Size	16 K
Queuing Buffer	64 MB
Jumbo frame	16383
Routing Table Size	30 K
802.1Q VLAN	1 ~ 4094, partition at will
Dimensions (L x W x H) (mm)	442 x 316 x 44
<b>Power</b>	
Consumption	60 W (max.)
Power Input	AC 100 ~ 240 V, 47 ~ 63 Hz, 1A/230V, RPS power hot standby
LED Indicators	Power, system, link, activity, 10/100M
Temperature	Operating: 0 ~ 50°C, non-operating: -40 ~ 70°C
Humidity	0 ~ 90% (no condensing)
<b>Functions</b>	
Spanning Tree	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE802.1s MSTP
VLAN	Port-based VLAN, 802.1Q tag VLAN, VLAN Stacking (QinQ), Super VLAN, Private VLAN, GVRP dynamic VLAN configuration

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	<b>S3448</b>
<b>Traffic Control</b>	Back pressure at half-duplex, 802.3x at full-duplex, CAR support, 64 K step size
<b>Broadcast Control</b>	Stop sending at threshold to restrict broadcast storms
<b>Multicast Control</b>	IGMP snooping
<b>Port Trunking</b>	Up to 32 groups with up to 8 ports per group, dynamic LACP or static aggregation
<b>Port Mirroring</b>	Supported. Can be based on flow classification and based on port
<b>Clustering</b>	Up to 256, manageable through single IP
<b>Unicast</b>	Static, RIP v1/v2, OSPF v2, BEIGRP (compatible with Cisco EIGRP), BGP v4, Intelligent forwarding to defend against virus attacks and illegal access
<b>Multicast</b>	IGMP v1/v2/v3, PIM-SM/DM
<b>Redundant Routing</b>	VRRP
<b>Proxy</b>	Proxy ARP, DNS Proxy
<b>DHCP</b>	DHCP Server/Client/Relay
<b>NAT</b>	Static or dynamic NAT
<b>Security</b>	IEEE 802.1x port-based user authentication QinQ double VLAN Security Port Security Hardware support for IP ACL, MAC ACL Hardware support for port-based user authentication by combinations and bandings of port, IP address, and MAC address Web user authentication Remote authentication through RADIUS User privilege classification and password protection
<b>QoS</b>	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

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	<b>S3448</b>
<b>Network Management</b>	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

### **3. Order Information**

<b>A-GEAR S3448</b>	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
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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.