

Product Specification

A-GEAR S3500E

High Performance Gigabit Ethernet Switch



A-GEAR™ S3500E series belong to enhanced L3 congestion-less switch series, which are capable of multi-layer switching and wire-speed route forwarding. Its high-performance ASIC and modular design enable you to employ a suitable number of interfaces and to configure various networks with great flexibility, all based on their individual requirements. It supports many access authentication models that can be flexibly configured, making it especially ideal for community access networks. Due to its high performance and low cost, A-GEAR™ S3524E, S3524GXE are considered a very competitive Ethernet switching solution for community networking and workgroup networking in enterprise networks.

1. Application

- Aggregation level of enterprise networks
- Giga core of small- to Medium-sized business networks
- Connection server cluster of data centers
- A multi-layer solution with high performance but low cost, which is applied when multiple Giga ports are needed in other situations where multiple Giga ports are needed

2. Features

2.1. Excellent performance

- 64 Gbps switch fabric
- Hardware routing, wire-speed L3 switching, packet forwarding rate: 36 Mpps
- Giga optical fiber supports up to 80 km long-distance transfer, direct connection to MAN backbone networks

2.2. Security and reliability

- Quota system for connected hosts per port
- IEEE 802.1x port-based user authentication
- Ethernet port trunking provides more bandwidth and system redundancy

A-GEAR World Wide Manufacturing

- Powerful ACL supports L2-L4 data filtering
- Web portal authentication
- Redundant power supply

2.3. Easy maintenance

- Supports device stacking through cluster technology. Central management with unified IP address saves IP addresses
- Management via CONSOLE port, Web, SNMP, etc.
- BootRom and other software upgrade through TFTP
- Support DHCP and relay, provide dynamic IP address assignment
- Support SFP standard interface, protect your investment

2.4. Powerful traffic and broadcast control

- Automatically detect and restrain broadcast storm, support IGMP datagram snooping, effectively restrict broadcast flooding
- Full- and half- duplex traffic control
- Ethernet port bit rate quota
- Advanced buffer management supports 802.1p, with 4 dispatching queues per port mapping the 8 priority queues in 802.1p
- IP multicast and QoS support
- Jumbo frame

2.5. Multiple routing polices

- Static routing
- Support RIP v1/v2, OSPF v2, and many other dynamic routing protocols
- Support VRF
- Support PIM-SM, PIM-DM and many other multicast routing protocols

3. Specifications

	S3524E	S3524GXE
Port	20 10/100/1000M TX 4 GSFP/TX Combo	20 GSFP Slots 4 GSFP/TX Combo
Switch Fabric	64 G	
Forwarding Rate	36 Mpps	
Switching Mode	Store-and-forward	
MAC Address Table Size	32 K	
Jumbo frame	16383	
Max. VLAN	4 K	
Routing Table Size	20 K	

A-GEAR World Wide Manufacturing

	S3524E Functions	S3524GXE
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, VLAN Stacking (QinQ)	
Traffic Control	Back pressure at half-duplex, 802.3x at full-duplex, CAR support, 100M port: 1M step size; 1000M port: 8M step size	
Storm Control	Stop sending at threshold to restrict broadcast/multicast/unicast storms	
Multicast Control	IGMP snooping	
Multicast Protocol	IGMP v1/v2/v3, PIM-SM, PIM-DM	
Port Trunking	Up to 32 groups with up to 8 ports per group, dynamic LACP or static aggregation	
Port Mirroring	Supported. Can be based on flow classification	
Cluster	Cluster up to 32, manageable through single IP	
Unicast	Static, RIP v1/v2, OSPF v2, BGP v4	
Redundant Routing	VRRP	
Proxy	Proxy ARP	
DHCP	DHCP Server/Client/DHCP Relay	
NAT	Static or dynamic NAT	
Security	IEEE 802.1x port-based user authentication Port Security Hardware support for IP ACL, MAC ACL, VLAN ACL Hardware support for port-based user authentication by combinations and bandings of port, IP address, and MAC address Web user authentication RADIUS User privilege classification and password protection DHCP snooping, DHCP option82, IP Source Guard	
QoS	Head Of Line (HOL) blocking prevention mechanism 4 dispatching queues per port, mapping the 8 priority queues in 802.1p WRR, SP, and FIFO queuing algorithms Best Effort Service Differentiated Service Strict Priority Weighted Round Robin First Come First Serve TOS re-tagging RTS	

A-GEAR World Wide Manufacturing

	S3524E	S3524GXE
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	
Dimensions (L x W x H) (mm)	440 x 280 x 44.5	
Weight	< 5 kg	
Power Consumption	< 30 W	
Power Supply	AC 100 ~ 240 V, 47 ~ 63 Hz, DC 44 ~ 53 V	
Working environment		
Temperature	Operating: 20 ~ 50°C, non-operating: -40 ~ 70°C	
Humidity	10 ~ 90% (no condensing)	

4. Order Information

A-GEAR S3524E	All-Giga-port Ethernet switch. 20+4 ports (1 CONSOLE port, 20 10/100/1000M Ethernet ports, 4 1000M SFP/TX combo ports), support MCE
A-GEAR S3524GXE	All-Giga-port Ethernet switch. 20+4 ports (1 CONSOLE port, 20 gigabit SFP slots, 4 1000M SFP/TX combo ports), support MCE

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.