

# Product Specification

## A-GEAR S3552/S3552PoE

### High Performance Gigabit Ethernet Switch



A-GEAR™ S3552/S3552PoE is a standard L3 congestion-less switch series, which are capable of multilayer 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 multiple 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™ S3552/S3552PoE is 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

- 160 Gbps switch fabric
- Hardware routing, wire-speed L3 switching, packet forwarding rate: 78 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

- 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

## 3. Specifications

	S3552/S3552PoE
Port	48 10/100/1000M TX, 4 Gigabit SFP slots
Switch Fabric	160Gbps
Forwarding Rate	78 Mpps
Switching Mode	Store-and-forward
MAC Address Table Size	8 K
Jumbo frame	16383
Max. VLAN	4 K
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, VLAN Stacking (QinQ)

**A-GEAR World Wide Manufacturing**

	<b>S3552/S3552PoE</b>
<b>Traffic Control</b>	Back pressure at half-duplex, 802.3x at full-duplex, CAR support, 100M port: 1M step size; 1000M port: 8M step size
<b>Storm Control</b>	Stop sending at threshold to restrict broadcast/multicast/unicast 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
<b>Unicast</b>	Static, RIP v1/v2, OSPF v2, BGP v4
<b>Redundant Routing</b>	VRRP
<b>Proxy</b>	Proxy ARP
<b>DHCP</b>	DHCP Server/Client/DHCP Relay
<b>NAT</b>	Static or dynamic NAT
<b>Security</b>	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
<b>QoS</b>	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
<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

S3552/S3552PoE	
Physical and electrical parameters	
Dimensions (L x W x H) (mm)	440 x 280 x 44.5
Weight	< 5 kg
Power Consumption	< 120 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 S3552	All-Giga-port Ethernet switch. 48+4 ports (1 CONSOLE port, 48 10/100/1000M Ethernet ports, 4 Gigabit SFP slots)
A-GEAR S3552PoE	All-Giga-port Ethernet switch. 48+4 ports (1 CONSOLE port, 48 10/100/1000M Ethernet ports, 4 Gigabit SFP slots) , PoE support

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.