



## AK-S6800 Series 10G Security Switch

### General Description

S6800 Series are All 10GE security routing Ethernet switch with high-performance, highsecurity and multi-service. S6800 series has advanced hardware design with hot-swapped power redundancy. It can support up to 24\*10GE ports and 2\*40G ports. Advanced nonblocking array exchange and huge packet cache support smooth operation at the extreme circumstance. It is for IP MAN convergence layer and large-scale enterprise zone or the core of the network layer.

#### S6828T



- Backplane width 128Gbps
- Forwarding Capacity 95.2Mpps
- 12\*10/100/1000Base-T
- 12\*Combo ports
- 2\*10GE slots
- 1+1 power redundancy
- Support stack
- Full-loaded < 40W
- 440mm\*300mm\*44mm

#### S6828S



- Backplane width 128Gbps
- Forwarding Capacity 95.2Mpps
- 12\*100/1000Base-X SFP ports
- 12\*Combo ports
- 2\*10GE slots
- 1+1 power redundancy
- Support stack
- Full-loaded < 50W
- 440mm\*300mm\*44mm

#### S6852T



- Backplane width 256Gbps
- Forwarding Capacity 130.9Mpps
- 44\*10/100/1000Base-T
- 4\*Combo ports
- 2\*10GE slots
- 1+1 power redundancy
- Support stack
- Full-loaded < 60W
- 440mm\*300mm\*44mm


**S6852S**


- Backplane width 256Gbps
- Forwarding Capacity 130.9Mpps
- 44\*100/1000Base-X SFP ports
- 4\*Combo ports
- 2\*10GE slots
- 1+1 power redundancy
- Support stack
- Full-loaded < 70W
- 440mm\*300mm\*44mm

## Specification

Item	S6828T	S6828S	S6852T	S6852S
Backplane Capacity	128Gbps	128Gbps	256Gbps	256Gbps
Switch Capacity	128Gbps	128Gbps	256Gbps	256Gbps
Throughput (IPv4/IPv6)	95.2Mpps	95.2Mpps	130.9Mpps	130.9Mpps
Memory & Flash	256MByte DDR2 SDRAM memory 8MB flash			
Redundancy design	1+1 hot-swap redundant power			
Power supply	AC: Input 100~240V, 50~60Hz			
Power consumption	Full-loaded ≤ 40W Idle ≤ 15W	Full-loaded ≤ 50W Idle ≤ 15W	Full-loaded ≤ 60W Idle ≤ 30W	Full-loaded ≤ 70W Idle ≤ 30W
Dimensions (W/D/H) (Unit:mm)	440×380×44	440×380×44	440×380×44	440×380×44
Weight (Full-loaded)	≤ 6kg	≤ 6kg	≤ 6.5kg	≤ 6.5kg
Environmental requirements	Working temperature: -15°C~55°C Storage temperature: -40°C~70°C Relative humidity: 10%~90%, non-condensing			

## Business Features

Item	FC-S6800 Series	
L2 features	MAC	128K MAC address MAC Black Hole Port MAC Limit Source MAC filtration



	VLAN	4K VLAN entries Port-based/MAC-based/IP subnet-based VLAN Port-based QinQ and Selective QinQ (StackVLAN) 1:1 and N:1 VLAN VLAN Swap and VLAN Remark PVLAN to realize port isolation and saving public-vlan resources GVRP
	Spanning tree protocol	IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol instances (MSTP) Remote loop detecting
	Port	Bi-directional bandwidth control Static link aggregation and LACP(Link Aggregation Control Protocol) Port mirroring and traffic mirroring
Security features	User's security	Anti-ARP-spoofing Anti-ARP-flooding IP Source Guard create IP+VLAN+MAC+Port binding Port Isolation MAC address binds to port and port MAC address filtration IEEE 802.1x and AAA/Radius authentication
	Device security	Anti-DOS attack(such as ARP, Synflood, Smurf, ICMP attack), ARP detection, worm and Msblaster worm attack SSHv2 Secure Shell SNMP v3 encrypted management Security IP login through Telnet Hierarchical management and password protection of users
	Network security	User-based MAC and ARP traffic examination Restrict ARP traffic of each user and force-out user with abnormal ARP traffic Dynamic ARP table-based binding IP+VLAN+MAC+Port binding L2 to L7 ACL flow filtration mechanism on the 80 bytes of the head of userdefined packet Port-based broadcast/multicast suppression and auto-shutdown risk port URPF to prevent IP address counterfeit and attack DHCP Option82 and PPPoE+ upload user's physical location Plaintext authentication of OSPF、RIPv2 and BGPv4 packets and MD5 cryptograph authentication
IP routing	IPv4	ARP Proxy DHCP Relay DHCP Server Static route RIPv1/v2 OSPFv2 BGPv4 ECMP Strategy route Route policy

**10GE Security Routing Switch**  
**Ak-s6800 Series**



	IPv6	MLD Snooping IPv6 telnet DHCPV6 Snooping IPv6 ACL IPv6 Web management ospfv2/v3 ripv1/v2 pim-dm/pim-sm/pim-ssm igmp/igmp-proxy bgp4 mld/mld-proxy ldp/mps DHCPv6 relay/Server/client isis4 Static route Vrrp mail-alarm syslog pppoeplus urpf sntp ping/ping6
Service features	ACL	Standard and extended ACL Time Range ACL Rate-limit on sending and receiving packet on port Packet redirection Port-based flow-control Two-speed three-color CAR Packet filter providing filtering based on source/destination MAC address, source/destination IP address, port, protocol, VLAN, VLAN range, MAC address range, or invalid frame Packet filtration of L2~L7 even deep to 80 bytes of IP packet head
	QoS	Rate-limit to packet sending/receiving speed of port or self-defined flow and provide general flow monitor and two-speed tri-color monitor of self-defined flow Priority remark to port or self-defined flow and provide 802.1P, DSCP priority and Remark CAR(Committed Access Rate)、Traffic Shaping and flow statistics Packet mirror and redirection of interface and self-defined flow Super queue scheduler based on port and self-defined flow. Each port/ flow supports 8 priority queues and scheduler of SP, WRR and SP+WRR. Congestion avoid mechanism, including Tail-Drop and WRED
	Multicast	IGMPv1/v2/v3 IGMPv1/v2/v3 Snooping IGMP Filter MVR and cross VLAN multicast copy IGMP Fast leave IGMP Proxy PIM-SM/PIM-DM/PIM-SSM PIM-SMv6、PIM-DMv6、PIM-SSMv6



		MLDv2/MLDv2 Snooping MSDP
Reliability	Loop protection	EAPS and GERP (recover-time <50ms) Loopback-detection
	Link protection	FlexLink (recover-time <50ms) RSTP/MSTP (recover-time <1s) LACP (recover-time <10ms) BFD
	Device protection	VRRP host backup Double fault-tolerant backup of host program and configuration file 1+1 power hot backup
Maintenance	Network maintenance	Telnet-based statistics RFC3176 sFlow LLDP 802.3ah Ethernet OAM RFC 3164 BSD syslog Protocol Ping and Traceroute
	Device management	Command-line interface (CLI) , Console, Telnet and WEB configuration System configuration with SNMPv1/v2/v3 RMON (Remote Monitoring)1/2/3/9 groups of MIB NTP(Network Time Protocol) GN.LinkII Server NGBNView network management WEB-based network management Ping and Traceroute

## Ordering Information

Model	Description
S6828T	12*10/100/1000Mbps RJ45 ports, 12* Combo GE combo ports, 2*10GE slots SFP+, 2*power slots
S6828S	12*100/1000BaseX SFP ports, 12*Combo GE combo ports, 2*10GE slots SFP+, 2*power slots
S6852T	44*10/100/1000Mbps RJ45 ports, 4*Combo GE combo ports,2*10GE slots SFP+, 2*power slots
S6852S	44*100/1000BaseX SFP ports, 4*Combo GE combo ports, 2*10GE SFP+,2*power slots