

# HAN Networks

## S11003L Series

### Clustered Core Chassis Switch

#### Product Description

HAN S11003L Chassis Switch is a clustered multicore switch designed for the next-generation converged networks. S11003L series switch matches the application requirements of SMB scenarios, and can be deployed in medium and large video surveillance networks, smart device networks, campus networks and other scenarios according to business needs.



#### Product Characteristics

##### **Advanced Hardware Architecture Design & Rich Port Combination**

- HAN S11003L core switch integrates the management module with the business module. Any business module can serve as a management module simply by inserting it into slot 1, eliminating the need for a separate management module. It also offers modular design, high-density port expansion service, and rich port combinations of six types of line cards.

#### **Datasheet**

HAN S9140 Series

### **Rich Service Features**

- S11003L series caters to the application requirements of SMB scenarios, and can be deployed in medium and large video surveillance networks, smart device networks, campus networks and other scenarios according to business needs.
- Perfect two-layer and three-layer multicast routing protocol of S11003L Series can meet various types of network interconnection requirements, and can set up super-large campus networks, enterprise networks and industrial private networks, which meet the requirements of high-density, multi-terminal HD video surveillance and HD video conferencing.

### **Comprehensive Security Mechanisms**

- All ports have lightning protection capabilities up to 6KV, reducing the port damage caused by surges.
- Device-level Security Protection: S11003L Series adopts advanced hardware architecture design, realizing hierarchical scheduling and protection of messages, supports for defending against attacks on devices such as DoS, TCP SYN Flood, UDP Flood, broadcast storms, high traffic, etc., supports 6KV lightning protection, and supports command line hierarchical protection based on user levels.
- Comprehensive Security Certification: S11003L Series complies with IEEE 802.1x, Radius, BDTacacs+.
- Enhanced Service Security Mechanism: S11003L Series supports the plain text or MD5 authentications of relevant routing protocol; supports uRPF reverse route lookup technology, which can effectively control illegal business; supports DPI (Deep Packet Inspection) and DPF (Deep Packet Filtration), thus effectively isolating illegal data packets and improving the security of the network system.

### **Innovative Green Environmental Design**

- Smart Power Management System: S11003L Series adopts advanced power system architecture design, achieving efficient power conversion, private power monitoring, soft start, and sequential power-up functions, real-time monitoring of the overall operation status, intelligent adjustment and deep energy-saving.
- Smart Fan Management System: S11003L Series is designed with the intelligent fan design, supporting automatic speed adjustment and independent zone control, effectively reducing noise, and prolong the service life of the fan.
- S11003L Series supports Efficient Ethernet and complies with International standard IEEE 802.3az, effectively reducing energy consumption.

## Product Specifications

Item	S11003L
Switching capacity	15.36Tbps
Forwarding	2880Mpps
Number of slots	3
Line card slots	3
MAC switching	Static configuration and dynamically learning of MAC address MAC browsing and removal Configuring of MAC aging time Limited number of learnable MAC addresses MAC filtering Black-hole MAC entry IEEE 802.1AE MacSec
VLAN	4K VLAN GVRP 1:1 and N:1 VLAN Mapping Basic QinQ and Flexible QinQ Private VLAN
STP	802.1D (STP), 802.1W (RSTP), 802.1S (MSTP) BPDU protection, root protection and loop protection
Multicast	IGMP v1/v2/v3 IGMP Snooping IGMP Fast Leave Multicast group policy and quantity limitation MVR PIM-SM and PIM-DM
IPv4	Static routing, RIP v1/v2, OSPF Policy-based routing(PBR) Load balance through equal-cost routing BFD for OSPF
IPv6	ICMPv6, DHCPv6, ACLv6, IPv6 Telnet IPv6 Neighbor Discovery Path MTU Discovery MLD and MLD Snooping IPv6 static routing, RIPng, OSPFv3 Manual tunnel, ISATAP tunnel and 6-to-4 tunnel
QoS	Flow classification based on L2~4 protocols CAR 802.1P/DSCP priority re-labeling SP, WRR and SP+WRR Congestion avoidance mechanisms like Tail-Drop, WRED

Item	S11003L
	<p>Flow monitoring and flow shaping</p> <p>Ingress and Egress ACL, support matching L2, L3, L4 and IP quintuple to copy, forward and discard</p> <p>Hash-based load balancing algorithm to ensure session integrity</p>
Security features	<p>L2~4 ACL flow identification and filtration</p> <p>DDoS attack prevention, TCP's SYN Flood attack prevention Suppression of broadcast, multicast and unknown unicast packet</p> <p>Port isolation</p> <p>Port security, IP+MAC+port binding</p> <p>DHCP Snooping, DHCP Option 82</p> <p>IEEE 802.1x authentication</p> <p>Radius and BDTacacs+ authentication</p> <p>uRPF</p> <p>Level-based command line protection</p>
Reliability	<p>Power supply 1+1 backup</p> <p>Static/LACP LAG, M-LAG</p> <p>EAPS</p> <p>VRRP</p> <p>ISSU</p>
Management and maintenance	<p>Console, Telnet and SSH</p> <p>SNMP v1/v2/v3</p> <p>TFTP</p> <p>RMON</p> <p>Statistics analysis of sFLOW, Netflow</p>
Energy saving	IEEE 802.3az EEE (Energy Efficient Ethernet)
Environment	<p>Operating:</p> <p>Temperature/Humidity: 0℃-40℃; 10%-90% non-condensing</p> <p>Storage:</p> <p>Temperature/Humidity: -20℃-70℃; 5%-95% non-condensing</p>
Power Supply	<p>AC: 100V-240V, 50Hz±10%</p> <p>DC: 48V</p>
Power supply slots	2
Dimensions mm (W*D*H)	<p>436×280×166mm</p> <p>4U</p>
Weight (empty chassis)	10kg

## Commercial references

Item	Description
<b>S11003L Chassis</b>	
S11003L	Integrated Chassis of S11003L switch (1 fan tray, 2 power slots excluding power supply, 3 line card slots, any line card inserted into slot1 can act as the main control module)
<b>S11003L Power Supplies</b>	
S110L-PA350	Hot-swap AC power module 350W
S110L-PD350	Hot-swap DC power module 350W
<b>Line Card of S11003L Series</b>	
S110L-24S2X	24-port GE SFP + 2-port 10GE SFP+ Line Card
S110L-24G2X	24-port GE RJ45 + 2-port 10GE SFP+ Line Card
S110L-48S2X	48-port GE SFP + 2-port 10GE SFP+ Line Card
S110L-48G2X	48-port GE RJ45 + 2-port 10GE SFP+ Line Card
S110L-24G24S2X	24-port GE RJ45 + 24-port GE SFP + 2-port 10GE SFP+ Line Card
S110L-8X	8-port 10GE SFP+ Line Card

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