



SMT 3900 L3 Stackable Series



Supports Maximum 48 GE TX Ports and 4 10GE SFP+ Uplink Ports



Advanced Hardware Architecture and Industry-leading Port Density



Carrier-Level High Reliability Layer-3 Routing Functions



Varied Service Characteristics Versatile IPv6 Solution Complete Security Mechanism

Product Overview

SMT 3900 L3 Stackable Series is a next-generation aggregation 10GE switch introduced by SMARTUS. It is targeted at the IP MAN (metropolitan area network), government and enterprise networks, Internet café and disk-less working environment. It is developed on the basis of high performance hardware. It supports functions such as powerful ACL, flexible QinQ, 1:1 or N:1 VLAN switching, Ethernet OAM, carrier-level QoS and industry-level 10GE Ether-ring, ensuring this switch series meets application requirements in all kinds of complicated sites. It also supports layer-3 routing protocol.

SMARTUS SMT 3900 Series has 3 models: SMT-390024T4F SMT-390048T6F SMT-390024F4S.

Product Characteristics

Innovative Virtual Cluster Switching Technique

SMT 3900 L3 Stackable Series virtualizes multiple physical devices into one. The performance, reliability and management of the virtual system are superior to the physical ones.

High Reliability: Based on the advanced distribution mechanism and efficient cross-physical link aggregation link function, the logic control plane, service control plane and service data plane are separated. Thus, SMT 3900 L3 Stackable Series can support continuous layer-3 routing forwarding, avoiding service interruption as a result of a single point of failure.



Product Characteristics

Industrial Ethernet Ring with Zero Delay and Zero Packet Loss

Supports industry-level EAPS and their protection shift time is less than 50ms. Their high reliability is represented by the null packet loss, which has been proved by many years of application in the Grid, rail transportation and defense systems.

Telecom-Level Ethernet Switch

Supports the telecom-level Ethernet-ring protection protocol with a protection shift time of less than 50ms, STP/RSTP/MSTP, backup of active and standby uplinks and LACP link aggregation to cater to the requirements of high reliability of carriers.

Support Ethernet standard 802.3u, 802.3x, 802.3ad, 802.1d, 802.1p, 802.1q, 802.1w, 802.1ad.

Support system status LED, port dynamic LED

Provides the perfect Ethernet OAM mechanism to monitor the network running status in real time for rapid trouble locating and detection.

Supports powerful ACL functions to access and control L2-L7 data based on physical port, VLAN, MAC, IP and protocol port ID, and providing carriers flexible and various policy control methods.

Supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade.

Supports various L2 multicast functions, including IGMP-Snooping, fast-leave and trans-vlan

Flexible and Convenient Management and Maintenance

Supports management modes such as the console port, Telnet, SSH, etc.

Supports the WEB management mode, which is easy and efficient so that it makes installation and debugging convenient.

Supports TFTP-patterned file upload/download management.

Supports ISSU (In-Service Software Upgrade).

Carrier-Level QoS Policies

Supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority to better streamline carrier's services.

Supports provides flexible bandwidth control policies and supports port-/flow-based flow limit, and ensuring the line speed forwarding of each port to make sure the high quality of video, audio and data services.

Supports 8 priority queues by each port.

Supports multiple queue schedule algorithms such as SP, WRR, or "P plus WRR"

Versatile IPv6 Solutions

Supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery, etc.

Supports Ping, Traceroute, Telnet, SSH, ACL and so like on the basis of IPv6, meeting IPv6 networks' equipment management requirements and service control requirements.

Perfect Security Mechanisms

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP-related SYN flood, UDP flood, broadcast storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Supports perfect security authentication mechanisms: IEEE 802.1x, Radius and BDTacacs+.

Supports storm/multicast/unicast limit to ensure the normal running of equipment in harsh network conditions.

Supports a perfect ring detection mechanism to ensure the long-term stable running of network.

Supports port isolation within the same VLAN, DHCP-Snooping, and IP plus MAC plus Port binding for ensuring user data security;

Model lists

SMT-390024T4F



- 24 GE TX ports
- 4 10GE/GE SFP+ ports

SMT-390024F4S



- 16 GE SFP ports,
- 8 GE SFP/TX combo ports
- 4 10GE/GE SFP+ ports

SMT-390048T6F



- 48 GE TX ports
- 6 10GE/GE SFP+ ports

Product Specifications

Item	SMT-390024T4F	SMT-390024F4S	SMT-390048T6F
Interface	24 GE TX 4 10GE/GE SFP+	16 100/1000M SFP 8 GE SFP/TX combo 4 10GE/GE SFP+	48 GE TX 6 10GE/GE SFP+
Console(RJ45)	1	1	1
Backplane(Gbps)	128	128	216
Forwarding rate(Mpps with 64 bytes)	96	96	162
Chassis	Dimensions (WxDxH)(mm)	440x180x44	440x280x44
	Weight(KG)(empty)	2.6	4
Package	Dimensions (WxDxH)(mm)	500x320x80	576x448x94
	Weight(KG)	3.9	5.2
Power consumption	no-load	< 22W	< 18W
	full-load	35W	< 38W
Power supply	AC: 100V-240V, 50-60Hz	45W	45W
POE power budget	/	/	/
Total output BTU (1000BTU/H=293W)	153.58	153.58	153.58
Fan number	/	2	2
Noise@25°C(dBA)	0	45	45
MTBF(H)	> 50,000	> 50,000	> 50,000
Forwarding mode	Store-forward	Store-forward	Store-forward
Flash (MB)	32	32	32
DRAM (MB)	256	256	256
MAC	16K	16K	16K
Buffer size(MB)	1.5	1.5	1.5
Interface vlan	64	64	64
Routing table	2040	2040	2040
Jumbo frame	9K	9K	9K

Features

VLAN

- 4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN, Voice-VLAN

Spanning Tree

- 802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
- BPDU guard, root guard and loopback guard

Multicast

- IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter

IP

- Static route, RIP, OSPF
- IPv4/v6 dual stack

IPv6

- ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet
- IPv6 neighbor discovery, Path MTU discovery
- MLD V1, MLD snooping
- IPv6 Static Routing, RIPng, OSPFv3
- Manual tunnel, ISATAP tunnel, 6 to 4 tunnel

QoS

- CAR, HQoS, MAC/IP/TCP/UDP/VLAN/ COS/ DSCP/ TOS based QoS, 802.1P/ DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping

Security

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky
- DA I & IP source guard PPPoE+
- IEEE 802.1x, AAA, Radius and BDTacacs+
- L2/L3/L4 ACL flow identification and filtration
- Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc.
- Broadcast/multicast/unknown unicast storm-control
- MD5, SHA-256, RSA-1024, AES256, etc.

DHCP

- DHCP server/relay/client
- DHCP snooping/option82

Reliability

- Static/LACP link aggregation, Interface backup
- EAPS and ERPS
- ISSU uninterrupted system upgrade
- VRRP
- UDLD

Management

- Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP
- ZTP
- SPAN, RSPAN
- Dying gasp*

Environment

- Operating temperature/humidity: 0°C -50°C ,10%-90% non-condensing
- Storage temperature/humidity: -20°C -70°C , 5%-95% non-condensing

Accessories

- Power cord, rackmount kits, console cable

Ordering Information

Item	Description
SMT 3900 L3 Stackable Series switch	
SMT-390024T4F	Ethernet Layer-3 lite switch with 24GE and 4 10GE ports (1 Console port, 24GE TX ports, 4 10GE/GE SFP+ ports; 100 to 240 VAC input, 60 HZ , fanless, 1U, standard 19-inch rack-mounted installation)
SMT-390024F4S	Ethernet Layer-3 lite switch with 24 GE and 4 10GE ports (1 Console port, 16 100M/1000M SFP ports, 8 GE SFP/TX combo ports, 4 10GE/GE SFP+ ports; 100 to 240 VAC input, 60 HZ, the cooling fan, 1U, standard 19 inch rack-mounted installation)
SMT-390048T6F	Ethernet Layer-3 lite switch with 48 GE and 6 10GE/GE SFP+ ports (1 Console port, 48 GE TX ports, 6 10GE/GE SFP+ ports; 100 to 240 VAC input, 60 HZ, the cooling fan, 1U, standard 19 inch rack-mounted installation)