

S3330 Series Stackable L3 Lite Access Switch Datasheet

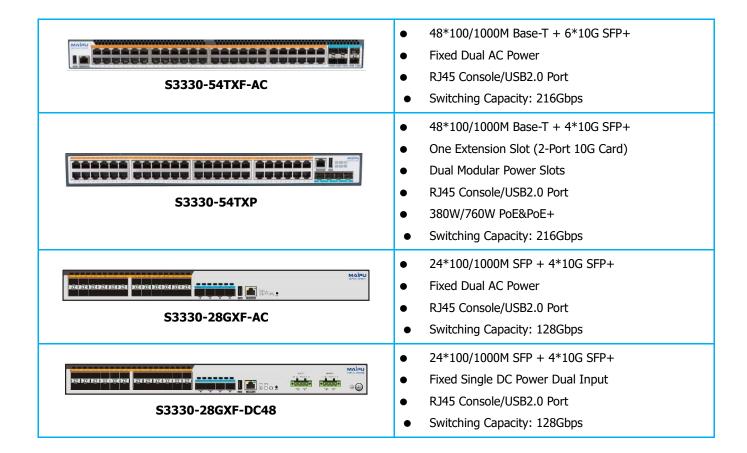
Product Overview

S3330 series switch is a high-performance stackable L3 Lite access routing switch developed by Maipu. It is applied in enterprise campus network and easy to deploy Layer2/3 switching solution that offers enhanced security and 10GE uplinks, Static Route/RIP/OSPF, L2 Multicast, VST/M-LAG stacking enabled and flexible management.

S3330 series switch can be used as access devices on enterprise branch networks. The switches help build highly reliable enterprise campus networks that are easy to expand and manage.

S3330 series switch includes S3330-12TXF-AC, S3330-12TXP-AC, S3330-28TXF-AC, S3330-28TXP-AC, S3330-54TXF-AC, S3330-54TXP, S3330- 28GXF-AC, S3330- 28GXF-DC48 eight models.

Modem Name	Specification
S3330-12TXF-AC	 8*100/1000M Base-T + 4*10G SFP+ Fixed Single AC Power RJ45 Console/USB2.0 Port Switching Capacity: 96Gbps
S3330-12TXP-AC	 8*100/1000M Base-T + 4*10G SFP+ Fixed Single AC Power RJ45 Console/USB2.0 Port 125W PoE&PoE+ Switching Capacity: 96Gbps
S3330-28TXF-AC	 24*100/1000M Base-T + 4*10G SFP+ Fixed Dual AC Power RJ45 Console/USB2.0 Port Switching Capacity: 128Gbps
S3330-28TXP-AC	 24*100/1000M Base-T + 4*10G SFP+ Fixed Dual AC Power RJ45 Console/USB2.0 Port 380W PoE&PoE+ Switching Capacity: 128Gbps



Key Features

Intelligent stacking technology

S3330 series switch supports Maipu VST stacking function. Multiple switches supporting stacking feature are combined to form a virtual switch logically. VST stacking system improves the device-class reliability by redundant backup among multiple member devices, and improves the link-class reliability by the link aggregation function across devices. VST provides a powerful network expansion capability. By adding member devices, it can easily expand the number of ports, bandwidth and processing capacity of the stacking system. VST simplifies the configuration and management. After stacking is formed, many physical devices become a virtual device, and users can log into the master switch to configure and manage all member devices of the stacking system in a unified manner.

S3330 series also support multi-chassis link aggregation group (M-LAG), which enables links of multiple switches to aggregate into one to implement cross-device link backup. The rest of switches in the M-LAG group are working actively regardless any switch failure. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.

High availability

S3330 series switch not only supports the traditional STP/RSTP/MSTP spanning tree protocol, but also supports the G.8032 international standard G.8032 protocol issued by ITU-T. This standard can realize 50ms millisecond fast protection switching of Ethernet ring network.

Perfect security policy

S3330 series switch provides various security policies such as user authority/identity authentication, port security, port rate limitation, port monitoring, ACL, loopback detection, and 802.1X authentication; provides various protect mechanisms for user access and network security. It has perfect security function design and supports MAC+IP+VLAN binding and 802.1X authentication security policies, and anti-network storm attack, anti DOS/DDOS attack, anti ARP attack, and anti-network protocol packet attack security technologies. In this way, the attacks and virus can be prevented and it is more suitable for large-scale, multi-service and complicated-traffic networks.

Advanced QoS

S3330 series switch supports eight queues per port and the queue scheduling policies such as SP, RR, WRR, and WDRR; rich priority mappings including 802.1p, COS, DSCP; Kbps-level port traffic rate restriction and carriers can limit the rate according to the time period; Tail Drop and RED packet loss algorithm.

IPv&IPv6 Dual-stack ability

S3330 series switch comes with IPv4/IPv6 dual-stack platform which provides hardware-based IPv4/IPv6 wire-speed forwarding and IPv4/IPv6 static routing protocol. With these IPv6 features, the S3330 can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping achieve IPv4-to-IPv6 transition.

Zero Touch Implementing

S3330 series support Zero Touch Provisioning (ZTP). It enables the switch to automatically obtain and load version files from file server through DHCP server or USB flash disk.

BD-LAN Controller Management

S3330 can be managed by Maipu BD-LAN controller, which is an integrated SDN platform for campus network. It simplifies campus network security, deployment, and management with the latest software-defined network technologies. It helps the network team complete most of the work on the BD-LAN controller platform. Compared with traditional methods, BD-LAN solution can make the network deployment faster, maintain the network easier, troubleshoot much more efficient, and save customer's overall cost.

Free Licensing Policy

Maipu always insists on "One-time investment" free license policy, the standard features and advanced features will be never divided to different version. For any new firmware version, Maipu will share to customers without extra charge. Compared with other manufacturers, Maipu free license policy can better protect users' short-term and long-term investment.

Technical Specifications

Product Model	S3330-12TXF-AC S3330-12TXP-AC	S3330-28TXF-AC S3330-28TXP-AC	S3330-28GXF-AC S3330-28GXF-DC48	S3330-54TXF-AC	S3330-54TXP
Hardware Specific		33330-261AF-AC	33330-286AF-DC48		
Device Structure	Desktop				
Physical Port	8*100/1000M Base-T interfaces, 4*10G SFP+ interfaces	24*100/1000M Base-T interfaces, 4*10G SFP+ interfaces	24*100/1000M SFP interfaces, 4*10G SFP+ interfaces	48*100/1000M Base-T interfaces, 6*10G SFP+ interfaces	48*100/1000M Base-T interfaces, 4*10G SFP+ interfaces
Extension Slots	N/A	N/A	N/A	N/A	One
RJ45 Console Port	1	1	1	1	1
USB2.0 Port	1	1	1	1	1
Power Supply	One Fixed AC	Dual Fixed AC	Dual Fixed AC (S3330-28GXF-AC) One Fixed DC (S3330-28GXF-DC48)	Dual Fixed AC	Dual Modular Power Slots
POE Power Consumption	125W (S3330-12TXP)	380W (S3330-28TXP)	N/A	N/A	380W/760W (S3330-54TXP)
Intelligent Fans	Fanless	Yes	Yes	Yes	Yes
Performance Parai	neters				
Switching Capability	96Gbps	128Gbps	128Gbps	216Gbps	216Gbps
Throughput	71.4Mpps	95.2Mpps	95.2Mpps	160.7Mpps	160.7Mpps
MAC Entry	16K	16K	16K	32K	32K
Routing Entry	512	512	512	512	512
L2 Multicast Entry	1K	1K	1K	1K	1K
Jumbo			12K		
VLAN Entry			4K		
Anti-lightning	6KV				
Anti-Static	6KV				
MTBF	>80000 hours				
Physical Index					
Dimension(W×D×H) (mm)	275*230*44.2	442*220*44.2 (S3330-28TXF) 442*380*44.2 (S3330-28TXP)	442*320*44.2 (S3330-28GXF-AC) 442*220*44.2 (S3330-28GXF-DC48)	442*320*44.2	442*420*44.2
Power Supply					
Power Input	AC:100-240V	AC:100-240V	AC:100-240V (S3330-28GXF-AC) DC: -40~57V (S3330-28GXF-DC48)	AC:100-240V	AC:100-240V
Power Consumption (without PoE)	≤25W	≤50W	≤45W	≤55W	≤55W
Environment					
Working Temperature	0°C~50°C				
Humidity	$10\sim$ 90%, non-cond	densing			
Software Specification	on				

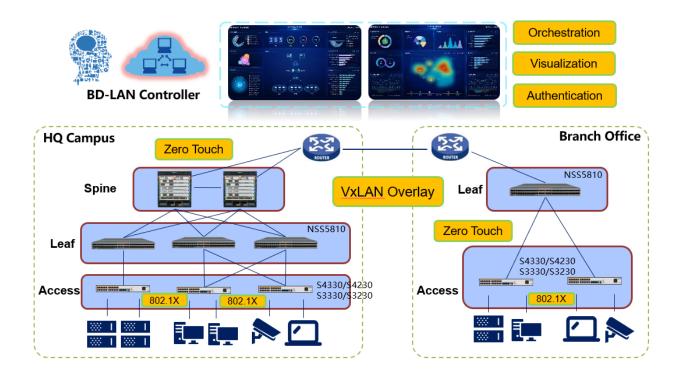
		Port Type UNI/NNI, Port Speed, Port MTU, Switch Port, Port Loopback, Port Energy Control, Loopback interface, Null interface	
		MAC address aging time, Mac address learning on off, Mac address learning limitation, Mac address VLAN bunding, MAC debug	
		VLAN, VLAN PVID, VLAN interface, VLAN Tag/Untag, VLAN Trunk, MAC VLAN, Protocol VLAN, Subnet VLAN, Super VLAN, Voice VLAN, VLAN Debug	
		STP/RSTP/MSTP, BPDU Guard, Flap Guard, Loop Guard, Root Guard, TC Guard	
Standard L2 protocol	LAN Features	G.8032(ERPSv1&v2)	
		Static Multicast, IGMP Snooping	
		LACP Link aggregation, LACP Port Priority, LACP Load Balance, LACP Rate Monitor, LACP Debug, M-LAG	
		Error-disable based on bpduguard Dai DHCP Snooping Link-Flap Loopback-detect Port Security Storm Control Transceiver Power, Error-disable recovery	
		ULFD, Track, Loopback Detection, Loopback Debug	
Standard L3 protocol	Routing Protocol	Static route, Static route V6, RIP v1/v2, OSPFv2, VRRP	
	DHCP	DHCP Server, DHCP Client, DHCP Relay, DHCP Snooping, DHCP Option51/82	
Virtualization	Stacking	H-VST, M-VST, M-LAG	
	MAD	MAD LACP, MAD BFD, MAD Fast-hello	
	ZTP Mode A	ZTP provisioning through DHCP server	
ZTP	ZTP Mode B	ZTP provisioning trough USB flash disk	
Network security	Port Security	Port Security On aging deny permit violation ACL	
	Network Security	IP Source Guard, DHCP Snooping, Host Guard, Dynamic ARP Inspection	
	Access Control List	Standard IP ACL, extended IP ACL, standard MAC ACL, extended MAC ACL, Standard Hybrid ACL, extended Hybrid ACL, Standard IPv6 ACL, extended IPv ACL	
	Anti-attack	Anti-attack detect drop flood log	
	AAA	Authentication, Authorization, Accounting, Radius, TACACS, 802.1x	
	Flow Classification	802.1P priority, DSCP priority	
	Traffic Speed Control	Rate Limit, Traffic Shaping	
QoS	Congestion Management	SP, RR, WDRR, SP+WRR	
	Congestion Avoidance	Tail-drop, RED, WRED	
Management	Network Management	SNMP v1/v2/v3, MIB, RMON, SYSLOG, DNS, CLI, Telnet, FTP/TFTP, Debug, Telemetry	
	Network Monitoring	SPAN, sFlow, LLDP, IP-SLA Based On ICMP-echo ICMP-path-echo ICMP-path-jitter VoIP jitter UDP echo	
IEEE Standard	IEEE 802.3 (10BASE-T) IEEE 802.3u (100BASE-T) IEEE 802.3z (1000BASE-X) IEEE 802.3ab (1000BASE-T) IEEE 802.3ae (10G BASE-X) IEEE 802.1x (port authentication) IEEE 802.3ad (Link Aggregation) IEEE 802.3x (Flow Control) IEEE802.3az (Energy Efficient Ethernet) IEEE 802.1d (STP) IEEE 802.1Q (Virtual LAN) IEEE 802.1w (RSTP) IEEE 802.1s (MSTP) IEEE 802.1p (Cos priority)		

Order Information

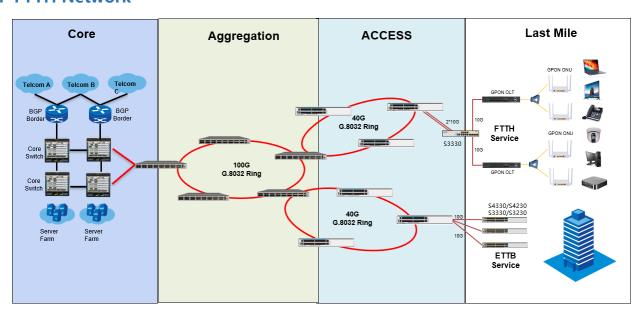
Series	Model	Description		
S3330 Series I	Host			
S3330 Series	S3330-12TXF-AC	8*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, Fixed One AC Power Supply.		
	S3330-12TXP-AC	8*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, PoE Enable, Fixed One AC Power Supply.		
	S3330-28TXF-AC	24*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, Fixed Dual AC Power Supply.		
	S3330-28TXP-AC	24*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, PoE Enable, Fixed Dual AC Power Supply.		
	S3330-28GXF-AC	24*100/1000M SFP interfaces, 4*10G SFP+ interfaces, Fixed Dual AC Power Supply.		
	S3330-28GXF-DC48	24*100/1000M SFP interfaces, 4*10G SFP+ interfaces, Fixed One DC Power Supply, Dual DC Input.		
	S3330-54TXF-AC	48*100/1000M Base-T interfaces, 6*10G SFP+ interfaces, Fixed Dual AC Power Supply.		
	S3330-54TXP	48*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, One Extension Slot, PoE Enable, Dual Power Slots.		
Extension Mod	lule			
10G Module	SM4C-2XGEF	2-Port 10G SFP+ Extension Module		
Power Module				
Power Module	AD500-1D005E	500W AC Power Module (For S3330-54TXP)		
Stacking Cable				
Stacking Cable	SFP-STACK-15	High speed stacking cable, SFP+ to SFP+,10Gbps, L=1.5m		
	SFP-STACK-30	High speed stacking cable, SFP+ to SFP+,10Gbps, L=3.0m		
	SFP-STACK-50	High speed stacking cable, SFP+ to SFP+,10Gbps, L=5.0m		

Typical Application

Campus LAN Network



ISP FTTH Network



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