





# 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
 <p><b>S3330-12TXF-AC</b></p>	<ul style="list-style-type: none"> <li>● 8*100/1000M Base-T + 4*10G SFP+</li> <li>● Fixed Single AC Power</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● Switching Capacity: 96Gbps</li> </ul>
 <p><b>S3330-12TXP-AC</b></p>	<ul style="list-style-type: none"> <li>● 8*100/1000M Base-T + 4*10G SFP+</li> <li>● Fixed Single AC Power</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● 125W PoE&amp;PoE+</li> <li>● Switching Capacity: 96Gbps</li> </ul>
 <p><b>S3330-28TXF-AC</b></p>	<ul style="list-style-type: none"> <li>● 24*100/1000M Base-T + 4*10G SFP+</li> <li>● Fixed Dual AC Power</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● Switching Capacity: 128Gbps</li> </ul>
 <p><b>S3330-28TXP-AC</b></p>	<ul style="list-style-type: none"> <li>● 24*100/1000M Base-T + 4*10G SFP+</li> <li>● Fixed Dual AC Power</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● 380W PoE&amp;PoE+</li> <li>● Switching Capacity: 128Gbps</li> </ul>

 <p><b>S3330-54TXF-AC</b></p>	<ul style="list-style-type: none"> <li>● 48*100/1000M Base-T + 6*10G SFP+</li> <li>● Fixed Dual AC Power</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● Switching Capacity: 216Gbps</li> </ul>
 <p><b>S3330-54TXP</b></p>	<ul style="list-style-type: none"> <li>● 48*100/1000M Base-T + 4*10G SFP+</li> <li>● One Extension Slot (2-Port 10G Card)</li> <li>● Dual Modular Power Slots</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● 380W/760W PoE&amp;PoE+</li> <li>● Switching Capacity: 216Gbps</li> </ul>
 <p><b>S3330-28GXF-AC</b></p>	<ul style="list-style-type: none"> <li>● 24*100/1000M SFP + 4*10G SFP+</li> <li>● Fixed Dual AC Power</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● Switching Capacity: 128Gbps</li> </ul>
 <p><b>S3330-28GXF-DC48</b></p>	<ul style="list-style-type: none"> <li>● 24*100/1000M SFP + 4*10G SFP+</li> <li>● Fixed Single DC Power Dual Input</li> <li>● RJ45 Console/USB2.0 Port</li> <li>● Switching Capacity: 128Gbps</li> </ul>

## 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.

## IPv4&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
<b>Hardware Specification</b>					
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, One Extension Slot
Extension Slots	N/A	N/A	N/A	N/A	1
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
<b>Performance Parameters</b>					
Switching Capability	96Gbps	128Gbps	128Gbps	216Gbps	216Gbps
Throughput	71.4Mpps	95.2Mpps	95.2Mpps	160.7Mpps	160.7Mpps
Flash	256MB			256MB	
Memory	512MB			1GB	
MAC Address Entry	16K			32K	
ARP Entry	2K			8K	
L2 Multicast Group	3K			6K	
Static Route Entry	420			2K	
Dynamic Route Entry	420			12K	
Jumbo	12K			12K	
VLAN Entry	4K			4K	
MSTP Instance	64			64	
Anti-lightning	6KV				
Anti-Static	6KV				
MTBF	>80000 hours				
<b>Physical Index</b>					
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
<b>Power Supply</b>					
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
<b>Environment</b>					
Working Temperature	0°C~50°C				
Humidity	10~90%, non-condensing				
<b>Software Specification</b>					
Standard L2 protocol	LAN Features	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			
		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, DNS			
	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	ZTP Mode A	ZTP provisioning through DHCP server			
	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 IPv6 ACL			
	Anti-attack	Anti-attack detect drop flood log			
	AAA	Authentication, Authorization, Accounting, Radius, TACACS, 802.1x			
QoS	Flow Classification	802.1P priority, DSCP priority			
	Traffic Speed Control	Rate Limit, Traffic Shaping			
	Congestion Management	SP, RR, WDRR, SP+WRR			
	Congestion Avoidance	Tail-drop, RED, WRED			
Management	Network Management	SNMP v1/v2/v3, MIB, RMON, SYSLOG, WEB(HTTP/HTTPS), 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)			

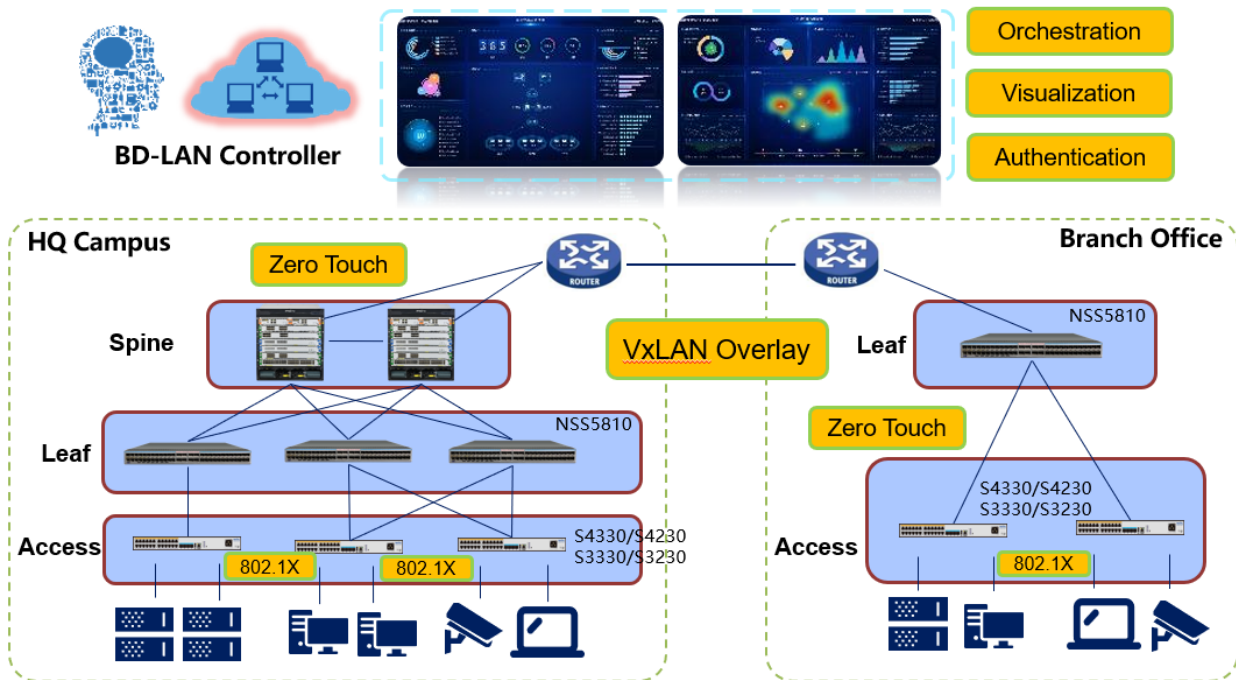
IEEE 802.3ad (Link Aggregation) IEEE 802.3x (Flow Control) IEEE802.3az (Energy Efficient Ethernet) IEEE 802.1d (STP) IEEE 802.1Q (Virtual LAN) IEEE 802.1w (RSTP) IEEE 802.1s (MSTP) IEEE 802.1p (Cos priority)
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# Order Information

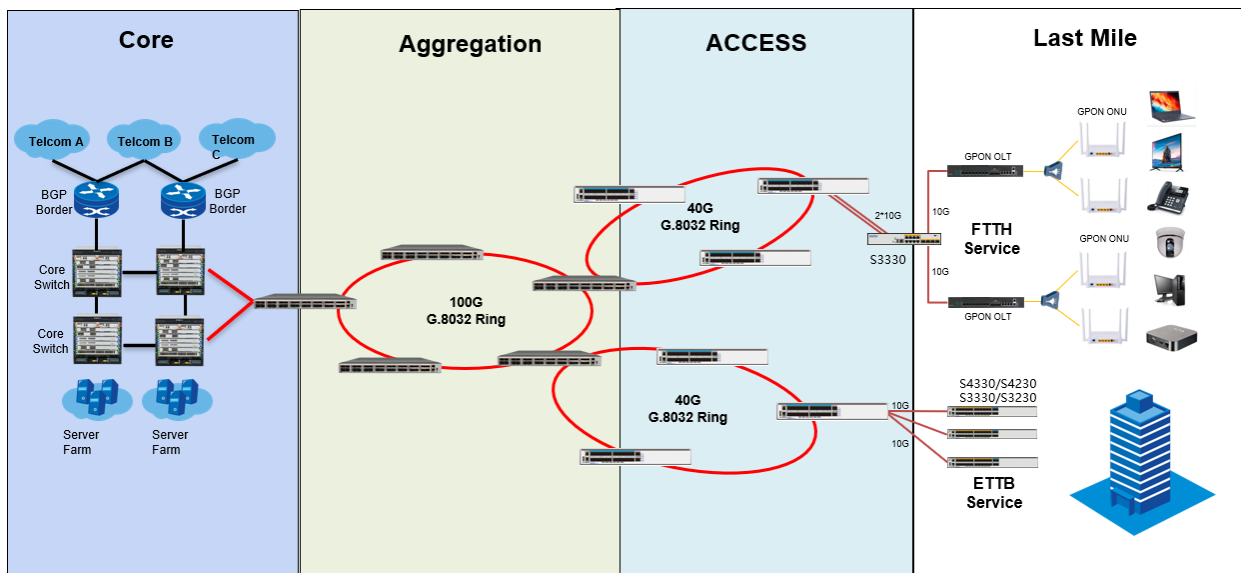
Series	Model	Description
<b>S3330 Series Host</b>		
S3330 Series	S3330-12TXF-AC	8*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, Fixed One AC Power Supply.
	S3330-12TXP-AC	8*100/1000M Base-T interfaces, 4*10G SFP+ interfaces, PoE Enable, Fixed One AC Power Supply.
	S3330-28TXF-AC	24*100/1000M Base-T 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.
<b>Extension Module</b>		
10G Module	SM4C-2XGEF	2-Port 10G SFP+ Extension Module
<b>Power Module</b>		
Power Module	AD500-1D005E	500W AC Power Module (For S3330-54TXP)
<b>Stacking Cable</b>		
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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