MAIPU

MMC

IS580 Series

L3 Cloud Managed Aggregation Switch



Overview

IS580 series switch is a high-performance stackable L3 aggregation routing switch developed by Maipu. It is applied in enterprise campus network and easy to deploy Layer3 switching solution that offers enhanced security and 1G/10G/25GE/40GE uplinks, RIP/OSPF/BGP/IS-IS, L2&L3 Multicast, VST/M-LAG stacking enabled and flexible management.

The IS580 series switch can be used as L3 aggregation devices and well meets the comprehensive SMB customer requirements such as branch office, hotel, restaurant, school, logistic, chain store, etc.

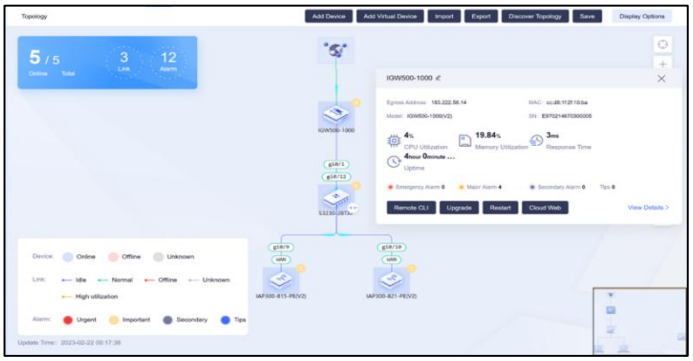
The IS580 series switch includes IS580-26XF, IS580-48XF, and IS580-50TXFP.

Model Name	Specification
 **IS580-50TXFP(V1)**	● 24*10/100/1000M Base-T ● 18*10G SFP+ ● 8*25G SFP28 ● Dual Power Slots ● RJ45 Console/RJ45 Management/USB2.0 Port ● Switching Capacity: 808Gbps
 **IS580-26XF(N1)**	● 24*10G SFP+ ● 2*40G QSFP+ ● Dual Power Slots ● Dual FAN Slots ● RJ45 Console/RJ45 Management/USB2.0 Port ● Switching Capacity: 640Gbps
 **IS580-48XF(N1)**	● 48*10G SFP+ ● Dual Power Slots ● Dual FAN Slots ● RJ45 Console/RJ45 Management/USB2.0 Port ● Switching Capacity: 960Gbps

Key Features

- **Cloud Based Management**

The IS580 series switch support cloud management by the MMC (Maipu Managed Cloud), the switches can be quickly deployed and configured from the cloud, reducing the installation cost. With cloud management, IT staff can remotely access and manage switches from anywhere with an internet connection, making it easier to troubleshoot.



- **High-Density 10G Ports and 40G Uplinks**

As the prevalence of application server network card speeds shifts from Gigabit to 10/25 Gigabit, there are new demands on port bandwidth and access density in network access layer switches. The IS580 series switches currently offer fixed configurations with 24/48*10G optical interfaces and provide 2*40G uplink interfaces. The flexible port combinations fully meet the interface composition and port density requirements for current network deployments in the access layer.

- **Intelligent stacking technology**

The IS580 series switch is equipped with Maipu VST stacking function that allows devices to be stacked into one logical device via the 10G/40G ports. VST (Virtual Switching Technology) stacking combines multiple switches to form a logical virtual switch, improving device and link reliability, network expansion, and simplifying configuration and management.

- **High availability**

The IS580 series switch offers advanced redundancy and reliability features, catering to diverse networking requirements. In addition to supporting traditional spanning tree protocols such as STP, RSTP, and MSTP, the switch also complies with the ITU-T G.8032 international standard. This Ethernet Ring Protection Switching (ERPS) protocol enables rapid 50ms failover within Ethernet ring network topologies, ensuring seamless connectivity and minimal downtime.

- **Perfect security policy**

The IS580 series switch offers a comprehensive suite of security features, including user authentication, port security, ACLs, loopback detection, and 802.1X authentication. It also incorporates IP Source Guard, DHCP/ND Snooping, Host Guard, Dynamic ARP Inspection, and PPPoE+ security mechanisms. These robust security functions ensure user access and network protection.

- **Advanced QoS**

The IS580 series switch offers sophisticated QoS capabilities for optimal network performance. Supporting eight queues per port and advanced scheduling algorithms such as SP, RR, WRR, and WDRR. The switch accommodates diverse priority mapping techniques, including 802.1p, COS, and DSCP, enabling fine-grained control over traffic classification and prioritization.

Technical Specifications

Model	IS580-26XF	IS580-48XF	IS580-50TXFP
Hardware Specification			
Physical Traffic Port	24*10G SFP+ interfaces 2*40G QSFP+ interfaces	48*10G SFP+ interfaces	24*10/100/1000M Base-T interfaces 18*10G SFP+ interfaces 8*25G SFP28 interfaces
Switching Capability	640Gbps	960Gbps	808Gbps
Power Slot	Dual	Dual	Dual
Fan Slot	Dual Modular	Dual Modular	Dual Fixed
Power Consumption	≤94W	≤100W	≤83W
Dimension (W×D×H)mm	442×420×44.2	442×420×44.2	442×420×44.2
Physical Management Port	1* RJ45 Console Port 1* DC0 Port 1* USB2.0 Port		
Input Voltage	AC:100-240V/50-60Hz		
Temperature	Work Temperature: -5℃ to 45℃ Storage Temperature: -40℃ to 70℃		
Humidity	Work Humidity:10%～90%, non-condensing Storage Humidity:5%～95%, non-condensing		
Anti-Lightning	6KV		
Anti-Static	6KV		
MTBF	>100000 hours		
Performance Parameters			
MAC Address Entry	384K	384K	384K
Jumbo Frame	12K	12K	12K
ARP Entry	62K	62K	62K
Max ND Entry	19K	19K	19K
VLAN Entry	4K	4K	4K
LACP Group	64	64	64
LACP Member in Group	32	32	32
MSTP Instance	64	64	64
IPv4 Routing Entry	632K	632K	632K
IPv6 Routing Entry	383K	383K	383K
L2 Multicast Entry	8K	8K	8K
L3 Multicast Entry	8K	8K	8K
VRF Entry	1K	1K	1K
VRRP Group	255	255	255
Software Specification			
Interface	Basic Port Configuration	Auto MDI/MDIX, Port Type UNI/NNI, Port Speed, Port MTU, Switch Port, Port Loopback, Port Energy Control	
	Logic Interface	Loopback Interface, Tunnel Interface, Null Interface, L2/L3 VLAN	

		Interface, L3 Ethernet Interface, VXLAN Interface
	MAC Address Management	Storm Control, Flood Control, MAC Address Aging Time, Mac Address Learning on| off, Mac Address Learning Limitation, Mac Address VLAN Binding, MAC Debug
VLAN	VLAN Management	VLAN, QINQ, Flexible QINQ, VLAN PVID, VLAN Tag/Untag, VLAN Trunk, MAC VLAN, Protocol VLAN, Subnet VLAN, Super VLAN, Voice VLAN, Private VLAN, Guest VLAN, VLAN Debug, GVRP, VLAN Isolation
Ring Protection	Spanning Tree Protocols	STP/RSTP/MSTP, BPDU Guard, Flap Guard, Loop Guard, Root Guard, TC Guard
	Other Ring Protocols	VIST/VIST+, G.8032(ERPSv1&v2)
Link Aggregation	LACP Configuration	LACP Link Aggregation, LACP Port Priority, LACP Load Balance, LACP Rate Monitor, LACP Debug
Error Handling	Error-disable Configuration	Error-disable Based on BPDU guard| DAI|DHCP Snooping |Link-Flap|Loopback-detect|Port Security |Storm Control |Transceiver Power, Error-disable Recovery
Fault Detection	Fault Detection Features	ULFD, Track, Loop-back Detection, CFM(802.1ag)
IP Services	IP Protocol	ARP, DNS, NTP Server/Client, ICMP, ECMP, GRE, IPIP, IPv6 over IPv4, ISATAP, IPv4 over IPv6, IPv6 over IPv6
	Routing Protocol	Static Routing v4/v6, RIP/RIPng, IRMP, OSPF v2/v3, BGP/BGP+, ISIS/ISIS v6, VRRP/VRRP v3, VBRP, PBR/PBR v6, IP-VRF
	DHCP Service	DHCP v4/v6 Server, DHCP v4/v6 Client, DHCP v4/v6 Relay, DHCP Snooping, DHCP Option51/82
Multicast Protocols	L2 Multicast Protocols	IGMPv1/v2/v3 Snooping, IGMP Snooping Proxy, MLD Snooping, MVR, MVP
	L3 Multicast Protocols	IGMPv1/v2/v3, PIM v4/v6-SM, PIM v4/v6-SSM, PIM-DM, PIM-SDM,
QoS	Priority Mapping	802.1P Priority, DSCP priority
	Traffic Classification	Three Color Marker, Priority Remark, Traffic Redirect, Traffic Meter, Traffic Mirror
	Traffic Control	Rate Limit, Traffic Shaping
	Scheduling Algorithm	SP, RR, WRR, WDRR, SP+WRR, SP+WDRR
	Congestion Management	Tail-drop, RED, WRED
MPLS	MPLS L3 VPN	LDP, MPLS BGP, MPLS Option-A & Option-B, Multi-VRF
	MPLS OAM	MPLS Ping/Traceroute, MPLS QoS, MPLS TE
Security	Port Security	Port Security On aging |deny |permit | violation |ACL
	Network Access Control	IP Source Guard(ISG), DHCP Snooping, ND Snooping, Host Guard
	Threat Prevention	Dynamic ARP Inspection(DAI), ARP Check, AARF ARP-Guard, ARP Speed Limit, ARP Source Suppression, PPPoE+
	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, Time-based ACL
	Anti-Attack	Anti-Attack Detect |Drop | Flood |Log, URPF, White List, Black List
	AAA	AAA, Radius, TACACS+, 802.1x, Portal
High Availability	Device Virtualization	H-VST, M-VST, M-LAG
	Multi-Active Detection	MAD LACP, MAD BFD, MAD Fast-Hello
	High availability Protocols	HA, ULFD, UDLD, G.8032, ULPP, Monitor Link, Track, VRRP,

		VRRPv3, VBRP, EEP, BFD with Static | RIP|OSPF|BGP|ISIS
Configuration and Maintenance	Monitoring and Diagnostics	SPAN, RSPAN, ERSPAN, VLAN SPAN, s-Flow, Telemetry, LLDP, IP-SLA
	Device Management	TR069, SNMP v1/v2/v3, MIB, RMON, SYSLOG, WEB(HTTP/HTTPS), CLI, Telnet, FTP/TFTP, Debug, Telemetry, ISSU, Hot Patch, Keepalive Gateway, Cloud Management
	Zero Touch Provisioning	ZTP Provisioning Through DHCP Server, ZTP Provisioning Through USB Flash Disk
Network Virtualization	VXLAN/EVPN	IPv4/IPv6 VXLAN Tunnel, Distributed VXLAN Gateway, VXLAN Static Centralized Gateway, VXLAN QoS, BGP-EVPN
	Data Center Interconnect(DCI)	END-TO-END VXLAN, VLAN Hand-Off, Cross As Segment VXLAN
IEEE Standard	IEEE 802.3 (10 BASE-T) IEEE 802.3u (100 BASE-T) IEEE 802.3z (1000 BASE-X) IEEE 802.3ab (1000 BASE-T) IEEE 802.3ae (10G BASE-X) IEEE 802.3by (25G BASE-X) IEEE 802.3ba (40G BASE-X) IEEE 802.3ah (Ethernet in the First Mile Operations, Administration, and Maintenance) IEEE 802.1x (Port-Based Network Access Control) IEEE 802.3ad (Link Aggregation) IEEE 802.3x (Flow Control) IEEE 802.1d (Spanning Tree Protocol) IEEE 802.1ab (Link Layer Discovery Protocol) IEEE 802.1Q (Virtual LAN) IEEE 802.1w (Rapid Spanning Tree Protocol) IEEE 802.1s (Multiple Spanning Tree Protocol) IEEE 802.1p (Class of Service Priority) IEEE 802.1ag (Connectivity Fault Management)	

Order Information

Model	Description	
IS580 Series		
IS580-50TXFP	V1 Version: 24-Port 10/100/1000M electric interfaces,18-Port 10G SFP+ interfaces, 8-Port 25G SFP28 interfaces, Dual Power Slots	
IS580-26XF	N1 Version: 24-Port 10G SFP+ interfaces, 2-Port 40G QSFP+ interfaces, Dual Fan Slots, Dual Power Slots	
IS580-48XF	N1 Version: 48-Port 10G SFP+ interfaces, Dual Fan Slots, Dual Power Slots	
FAN Module		
FAN-01C-01B	V21 Version: FAN-01C-01B Fan module	
Power Module		
AD120-1S005E	V1 Version: 120W Power Module, AC 100V~240V For IS580-50TXFP	
AD120M-HS0N	V21 Version: 120W Power Module, AC 100V~240V For IS580-26XF	
AD250-1S005E-B	V21 Version: 120W Power Module, AC 100V~240V For IS580-48XF	
DD250-5D005E	120W Power Module, DC -40V~57V For IS580-50TXFP	
DD250M-5S0N	120W Power Module, DC -40V~57V For IS580-26XF	
Stacking Cable		
10G 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
40G Stacking Cable	QSFP-STACK-10	QSFP DAC stacking cable, QSFP to QSFP, 40Gbps, 1.0 meters length
	QSFP-STACK-30	QSFP DAC stacking cable, QSFP to QSFP, 40Gbps, 3 meters length
	QSFP-STACK-50	QSFP DAC stacking cable, QSFP to QSFP, 40Gbps, 5 meters length
SFP Module		
1.25G Dual-Core SFP	MP-S85123-3CDLM	1.25G SFP 850nm 550m LC DDM Multi-mode
	MP-S31121-3CDL20	1.25G SFP 1310nm 10-20Km LC DDM Single-mode
1.25G BIDI SFP	MP-B35121-3CDL20	1.25G SFP Tx1310/Rx1550nm 10-20Km LC DDM Single-mode
	MP-B53122-3CDL20	1.25G SFP Tx1550/Rx1310nm 10-20Km LC DDM Single-mode
10G Dual-Core SFP+	MP-S851X3-NCLM	10G SFP+ 850nm 300m LC DDM Multi-mode
	MP-S311X2-NCL10	10G SFP+ 1310nm 10Km LC DDM Single-mode
	MP-S311X2-NCL20	10G SFP+ 1310nm 20Km LC DDM Single-mode
10G BIDI SFP+	MP-B231XL-3CD10	10G SFP+ Tx1270/Rx1330nm 10Km LC DDM Single-mode
	MP-B321XL-3CD10	10G SFP+ Tx1330/Rx1270nm 10Km LC DDM Single-mode
10G Copper	SFP-XGEA	V1, SFP-XGEA, 10GBASE-T RJ45, 30m
25G SFP28	SFP28-M1-L480C8D	25G SFP28, 850nm, 100m, LC, DDM, Multi-mode
	SFP28-S1-L480C3D	25G SFP28, 1310nm, 10km, LC, DDM, Singlei-mode
40G QSFP+	QSFP-M1-M768C8	40G QSFP+, 850nm, 100m, MPO, DDM, Multi-mode
	QSFP-M3-M768C8	40G QSFP+, 850nm, 300m, MPO, DDM, Multi-mode
40G QSFP+	QSFP-S1-L768C3	40G QSFP+, 1310nm, 10km, LC, DDM, Single-mode

MAIPU CLOUD REGISTRATION

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