IS230 Series

L2 Gigabit Cloud Managed Access Switch

Overview

IS230 Series L2 gigabit management access switch is developed for the Enterprise and SMB market. It provides the stable, reliable and secure high-performance switching service for high-speed internet. IS230 series provides the perfect solutions in the aspects of multi- service capability, security, reliability, management and maintenance. IS230 series can provide the low-cost, high-performance, and easy-management solutions for the enterprise network access.
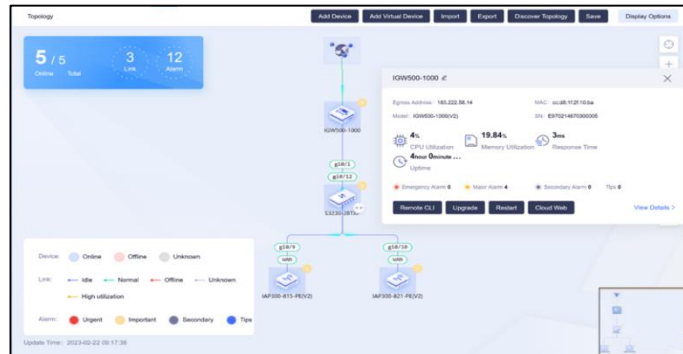
IS230 series switch includes IS230-10TF-AC, IS230-18TF-AC, IS230-28TF-AC, IS230-10TP-AC, IS230-20TP-AC, IS230-28TP-AC Six models.

Model Name	Specification
IS230-10TF-AC	• 8*10/100/1000M Base-T + 2*1G SFP • RJ45 Console Port • Switching Capacity: 20Gbps • Reset Button
IS230-10TP-AC	• 8*10/100/1000M Base-T + 2*1G SFP • RJ45 Console Port • 140W PoE&PoE+ • Switching Capacity: 20Gbps • Reset Button
IS230-18TF-AC	• 16*10/100/1000M Base-T + 2*1G SFP • RJ45 Console Port • Switching Capacity: 36Gbps • Reset Button
IS230-20TP-AC	• 16*10/100/1000M Base-T + 4*1G Combo • RJ45 Console Port • 280W PoE&PoE+ • Switching Capacity: 40Gbps • Reset Button
IS230-28TF-AC	• 24*10/100/1000M Base-T + 4*1G SFP • RJ45 Console Port • Switching Capacity: 56Gbps • Reset Button
IS230-28TP-AC	• 24*10/100/1000M Base-T + 4*1G SFP • RJ45 Console Port • 380W PoE&PoE+ • Switching Capacity: 56Gbps • Reset Button

Key Features

- ## Cloud Management

The IS320 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.

- ## Flexible Network Adaptability

The IS230 Series switches supports line-rate forwarding on all ports, providing greater network flexibility. Whether in small office networks or large-scale enterprise networks, this feature ensures data can be forwarded rapidly and efficiently, avoiding network transmission bottlenecks and delivering excellent network adaptability.

- ## High availability

The IS230 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 failover within Ethernet ring network topologies, ensuring seamless connectivity and minimal downtime.

- ## High Security

The IS230 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 Snooping, Dynamic ARP Inspection, and PPPoE+ security mechanisms. These robust security functions ensure user access and network protection. Additionally, the switch supports MAC binding, 802.1X authentication, and countermeasures against network storm, ARP, and protocol packet attacks. This makes the IS230 series ideal for access networks.

- ## Advanced QoS

The IS230 series switch offers sophisticated QoS capabilities for optimal network performance. Supporting eight queues per port and advanced scheduling algorithms such as SP, WRR, WFQ, SP+WRR and SP+WFQ, the switch effectively manages traffic prioritization and resource allocation. The switch accommodates diverse priority mapping techniques, including 802.1p and DSCP, enabling fine-grained control over traffic classification and prioritization.

- ## Zero Touch Provisioning

The IS230 series switch features advanced Zero Touch Provisioning (ZTP) capabilities, streamlining the deployment process for network administrators. With ZTP, the switch can automatically discover and load necessary version files from a file server via a DHCP server, eliminating the need for manual intervention during initial setup. This automation reduces configuration errors, accelerates the deployment process, and enhances overall network efficiency, making the IS230 series switch an ideal choice for scalable and dynamic network environments.

- **Rich Network Management**

The IS230 series switch offers a comprehensive set of management options. These options encompass network management protocols like SNMP and Cloud, configuration and control options like web and CLI, monitoring and diagnostic tools such as RMON and SYSLOG. These versatile features enable network administrators to effectively manage, monitor, and maintain optimal network performance locally.

Technical Specifications

Model	IS230-10TF-AC	IS230-18TF-AC	IS230-28TF-AC
Hardware Version	V1	V1	V1
Physical Traffic Port	8*10/100/1000M Base-T interfaces 2*1G SFP interfaces	16*10/100/1000M Base-T interfaces 2*1G SFP interfaces	24*10/100/1000M Base-T interfaces 4*1G SFP interfaces
Switching Capability	20Gbps	36Gbps	56Gbps
Management Port	1* RJ45 Console Port	1* RJ45 Console Port	1* RJ45 Console Port
Fixed Power Supply	One	One	One
Power Consumption	≤8W	≤10W	≤20W
Dimension (W×D×H)mm	280×180×44.2	440×208×44.2	440×208×44.2
Model	IS230-10TP-AC	IS230-20TP-AC	IS230-28TP-AC
Hardware Version	V1	V1	V1
Physical Traffic Port	8*10/100/1000M Base-T interfaces 2*1G SFP interfaces	16*10/100/1000M Base-T interfaces 4*1G Combo interfaces	24*10/100/1000M Base-T interfaces 4*1G SFP interfaces
Switching Capability	20Gbps	40Gbps	56Gbps
Management Port	1* RJ45 Console Port	1* RJ45 Console Port	1* RJ45 Console Port
Fixed Power Supply	One	One	One
Max PoE Power Consumption	140W	240W	380W
PoE Standard	IEEE 802.af/at	IEEE 802.af/at	IEEE 802.af/at
Power Consumption (Without PoE)	≤10W	≤20W	≤30W
Dimension (W*D*H) mm	280*180*44.2	440*208*44.2	440*208*44.2
Input Voltage	AC:100-240V/50-60Hz		
Temperature	Work Temperature: -5℃ to 50℃ Storage Temperature: -40℃ to 70℃		
Humidity	Work Humidity:10% ~ 90%, non-condensing Storage Humidity:5% ~ 95%, non-condensing		
Anti-Lightning	4KV		
Anti-Static	4KV		
MTBF	>10000 hours		

Software Specification		
Port	Basic Port Configuration	Auto MDI/MDIX, Port Speed, Port Duplex, Port MTU(Jumbo Frame), Port-isolation
	MAC Address Management	MAC Address Aging Time, MAC Address Learning ON|OFF, MAC Address Learning Limitation, Static MAC Address, MAC Address Filter
	Storm Control	Storm-control for BUM, Shutdown-control for BUM
VLAN	VLAN Management	VLAN, VLAN PVID, VLAN Trunk, VLAN Hybrid, VLAN Interface,

		MAC VLAN, Protocol VLAN, IP Subnet VLAN, Voice VLAN, Private VLAN, GVRP, Basic QinQ, Selective QinQ, 802.1ad, VLAN Mapping
Ring Protection	Spanning Tree Protocols	STP/RSTP/MSTP, BPDU Guard, BPDU Filter, Flap Guard, Loop Guard, Root Guard, TC Guard, BPDU L2protocol Tunnel
	Other Ring Protocols	G.8032(ERPS)
Link Aggregation	LACP Configuration	LACP Link Aggregation, LACP Port Priority, LACP Load Balance
Error Handling	Error-disable Configuration	Error-disable Based on BPDU-guard | Loopback-detect | Port Security, Error-disable Recovery
Fault Detection	Fault Detection Features	UDLD, Loop-back Detection, CFM, Monitor Link(MTLK)
IP Services	IP Protocol	ARP, DNS Client, SNTP Client, ICMP, IPv6, IPv6 ND/SLAAC
	Routing Protocol	Static Routing v4/v6 for Management
	DHCP Service	DHCP Relay/Client, DHCP Snooping, DHCP Snooping Option82
Multicast Protocols	L2 Multicast Protocols	IGMPv1/v2/v3 Snooping, Fast Leave, IGMP Snooping Querier, IGMP Filter, Static Group, MLD Snooping, MVR
QoS	Flow Classification	802.1P Priority, DSCP Priority, VLAN ID, MAC Prefix, IP Subnet, Protocol, IP Precedence, IPv6 Traffic Class, Ethernet Type
	Rate Limit	Rate Limit, Port-based Bandwidth
	Scheduling Algorithm	Port-based Priority, SP, WRR, WFQ, SP+WRR, SP+WFQ
Security	Port Security	Rule Based On IP/MAC/MAX/Sticky, Violation(Protect/Restrict/Shutdown), Recovery
	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
	AAA	Local Authentication, Radius(Authentication, User Login Authorization, User Login Accounting), TACACS+(Authentication, User Login Authorization, Command Authorization, User Login Accounting, Command Accounting)
	802.1X	Port-based 802.1X, MAC-based 802.1X, MAC-Authentication, Guest-VLAN, VLAN Distribution (Auto-VLAN), ACL Distribution
Configuration and Maintenance	Monitoring and Diagnostics	1:1 SPAN, N:1 SPAN, RSPAN, Flow-based Mirror, Ping, Tracert, DDM, VCT
	Device Management	Cloud Management, SNMP v1/v2/v3, SNMP Trap, RMON, SYSLOG (Logging to Terminal/Logging to Server/CLI Operation to Server), LLDP, WEB(HTTP), Console, Telnet, SSH, Cloud, System Upgrade (TFTP/FTP/SFTP/WEB), Configuration Management (Backup/Restore), Factory Reset, Password Reset
IEEE Standard	IEEE 802.3 (10BASE-T) IEEE 802.3u (100BASE-T) IEEE 802.3z (1000BASE-X) IEEE 802.3ab (1000BASE-T) IEEE 802.1ag (Connectivity Fault Management) 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 802.1p (Class of Service Priority) IEEE 802.1Q (Virtual LAN) IEEE 802.1ad (Double Tagged) IEEE 802.1d (Spanning Tree Protocol) IEEE 802.1w (Rapid Spanning Tree Protocol) IEEE 802.1s (Multiple Spanning Tree Protocol)	

Order Information

Model		Description
IS230 Series Host		
IS230 Series	IS230-10TF-AC	8-Port 10/100/1000M Base-T interfaces, 2-Port 1G SFP interfaces, Single AC Power
	IS230-10TP-AC	8-Port 10/100/1000M Base-T interfaces, 2-Port 1G SFP interfaces, 140W PoE&PoE+, Single AC Power
	IS230-18TF-AC	16-Port 10/100/1000M Base-T interfaces, 2-Port 1G SFP interfaces, Single AC Power
	IS230-20TP-AC	16-Port 10/100/1000M Base-T interfaces, 4-Port 1G Combo interfaces, 240W PoE&PoE+, Single AC Power
	IS230-28TF-AC	24-Port 10/100/1000M Base-T interfaces, 4-Port 1G SFP interfaces, Single AC Power
	IS230-28TP-AC	24-Port 10/100/1000M Base-T interfaces, 4-Port 1G SFP interfaces, 380W PoE&PoE+, Single AC Power
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
1.25G Copper	SFP-GETA	V2 Version: 10/100/1000M Base-T, RJ45 interface, Serdes

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