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# **IS230 Series**

# L2 Gigabit Access Switch Datasheet

Maipu Communication Technology Co., Ltd Maipu Mansion, No.16, Jiuxing Avenue Hi-Tech Zone Chengdu, Sichuan Province P. R. China URL: http:// www.maipu.com

### **Product 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	<ul> <li>8*10/100/1000M Base-T + 2*1G SFP</li> <li>RJ45 Console Port</li> <li>Switching Capacity: 20Gbps</li> <li>Reset Button</li> </ul>
IS230-10TP-AC	<ul> <li>8*10/100/1000M Base-T + 2*1G SFP</li> <li>RJ45 Console Port</li> <li>140W PoE&amp;PoE+</li> <li>Switching Capacity: 20Gbps</li> <li>Reset Button</li> </ul>
IS230-18TF-AC	<ul> <li>16*10/100/1000M Base-T + 2*1G SFP</li> <li>RJ45 Console Port</li> <li>Switching Capacity: 36Gbps</li> <li>Reset Button</li> </ul>
IS230-20TP-AC	<ul> <li>16*10/100/1000M Base-T + 4*1G SFP</li> <li>RJ45 Console Port</li> <li>280W PoE&amp;PoE+</li> <li>Switching Capacity: 40Gbps</li> <li>Reset Button</li> </ul>
IS230-28TF-AC	<ul> <li>24*10/100/1000M Base-T + 4*1G SFP</li> <li>RJ45 Console Port</li> <li>Switching Capacity: 56Gbps</li> <li>Reset Button</li> </ul>
IS230-28TP-AC	<ul> <li>24*10/100/1000M Base-T + 4*1G SFP</li> <li>RJ45 Console Port</li> <li>380W PoE&amp;PoE+</li> <li>Switching Capacity: 56Gbps</li> <li>Reset Button</li> </ul>

### **Key Features**

#### **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-/		IS230-18TF-AC	IS230-28TF-AC
Hardware Vers	sion	V1		V1	V1
Physical Traffic	Port	8*10/100/1000M interfaces 2*1G SFP interf		16*10/100/1000M Base-T interfaces 2*1G SFP interfaces	24*10/100/1000M Base-T interfaces 4*1G SFP interfaces
Switching Capa	bility	20Gbps		36Gbps	56Gbps
Management Po	ort	1* RJ45 Console	e Port	1* RJ45 Console Port	1* RJ45 Console Port
Fixed Power Su	pply	One		One	One
Power Consum	ption	≤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 Vers	sion	V1		V1	V1
Physical Traffic Port 2*1G SFP interfaces			16*10/100/1000M Base-T interfaces 4*1G SFP interfaces	24*10/100/1000M Base-T interfaces 4*1G SFP interfaces	
Switching Capa	ability 20Gbps			40Gbps	56Gbps
Management Po	ort	1* RJ45 Console	e Port	1* RJ45 Console Port	1* RJ45 Console Port
Fixed Power Su	pply	One		One	One
Max PoE Power Consumption	r	140W		280W	380W
PoE Standard		IEEE 802.af/at		IEEE 802.af/at	IEEE 802.af/at
Power Consum (Without PoE)	ption	≤10W		≤20W	≤30W
Dimension (W*E mm	D*H)	280*180*44	.2	440*208*44.2	440*208*44.2
Input Voltage		AC:100-240V/50-60Hz			·
Temperature		Work Temperature: -5°C to 50°C Storage Temperature: -40°C to 70°C			
		Work Humidity:10% ~ 90%, non-condensing			
Humidity		Storage Humidity:5% ~ 95%, non-condensing			
Anti-Lightning		4KV			<b>.</b>
Anti-Static		4KV 4KV			
MTBF		>10000 hours			
Software Sp	ecific	ation			
Port Basi				/MDIX, Port Speed, Port Duplex, Por	t MTU(Jumbo Frame), Port-
		C Address MAC Addre		ess Aging Time, MAC Address Learn Limitation, Static MAC Address, MAC	
	Stor	m Control Storm-control for BUM, Shutdown-control for BUM			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	ection Features UDLD, Loop-back Detection, CFM, Monitor Link(MTLK)			
IP Services	IP Protocol	ARP, DNS Client, NTP Client, ICMP, IPv6, IPv6 ND/SLAAC			
	Routing Protocol	I 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	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 AC Standard Hybrid ACL, Extended Hybrid ACL, Standard IPv6 ACL, Extended 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, 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	SNMP v1/v2/v3, 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			
	Zero Touch Provisioning	ZTP Through DHCP Server			
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 802.3ad (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, 150W 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 SFP interfaces, 260W 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			



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