CMS3200

Managed Ethernet Switch

L2+ managed, 8/16/24*10/100/1000Base-T + 2/4*1G SFP/Combo

Overview

AOA Tech CMS3200 series L2+ managed Gigabit Ethernet switch adopts a new generation of high performance hardware and software platform to provide flexible and cost-effective full Gigabit access and uplink ports, supports complete security protection mechanism, perfect ACL/QoS policy, and flexible VLAN function, and is easy to manage and maintain.

Features

Hardware Features

- Provide 8/16/24 multi-spec port products; all ports have Gigabit wire speed forwarding capability to meet different user needs.
- The whole series supports the "Ethernet port + optical port" combination, which is convenient for users to group the network flexibly and meet the demand of various scenarios.
- Support under-voltage, over-voltage, over-current, overload, and over-temperature protection, providing users with a safer, more stable, and more reliable experience.
- Support surge, fast pulse, electrostatic protection, significantly extending the device's service life.
- Complete LED indicator, easy for users to identify the device's working status quickly.
- Adopt high quality wide temperature components to ensure stable operation of the device in residential, commercial, and light industrial environments.
- IP30 anti-oxidation metal housing, durable.

Software Features

- Support IEEE 802.1Q VLAN, so you can flexibly divide VLANs according to your needs.
- Supports voice VLANs and configures QoS parameters for voice data streams to improve transmission priority and ensure call quality.
- Support QoS, supporting three priority modes based on port, 802.1P and DSCP, and four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.
- ACLs are supported to provide flexible security access control policies by configuring matching rules, processing operations, and time permissions to filter packets.
- Support IGMP V1/V2/V3 multicast protocols and IGMP Snooping to meet the needs of multi-terminal HD video surveillance and video conference access.
- Support multicast VLAN, multicast filtering, efficient data transmission, saving network bandwidth and reducing network load.
- Support port monitoring, which makes a copy of the packets of the monitored port to the monitoring port to realize network monitoring.

Complete Security Protection

- Supports IP address, MAC address, VLAN, and port binding to filter packets.
- Supports ARP protection to protect against ARP spoofing and ARP flooding attacks, such as gateway spoofing and intermediate mythical attacks commonly found in LANs.
- IP source protection is supported to protect against illegal address spoofing, including MAC spoofing, IP spoofing, and MAC/IP spoofing.
- Supports DoS protection against Land Attack, Scan SYNFIN, Xmascan, Ping Flooding, and other attacks.
- Supports 802 .1X authentication, providing authentication for LAN computers and controlling the authorization status of controlled ports based on authentication results.
- Supports port security, stopping learning when the maximum number of MAC addresses is reached, preventing MAC address attacks, and controlling port network traffic.

Reliability Protection

- Support STP/RSTP/MSTP spanning tree protocol to eliminate layer 2 loops and realize link backup.
- Support ITU-T G.8032 ERPS ring function, based on traditional Ethernet MAC and bridge functions to achieve Ethernet ring network millisecond fast protection reversal.
- Support spanning tree security function to prevent devices in spanning tree network from various forms of malicious attacks.
- Support static convergence and dynamic convergence to effectively increase link bandwidth, achieve load balancing, link backup, and improve link reliability.

PoE Function (only for PoE models)

- PoE models support IEEE 802.3af/at PoE power supply standard to meet the demand for PoE power supply for security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- Supports user-defined time period control of PoE port power supply in the web management interface.
- The Web network management interface automatically identifies PoE port information.

Easy Operation

- Supports diverse management and maintenance methods such as Web-based network management, CLI commands (Console, Telnet), and SNMP (V1/V2/V3).
- Support HTTPS, SSL V3, TLSV1, SSH V1/V2, and other encryption methods for more secure management.
- Support RMON, system log, and port traffic statistics for network optimization and transformation.
- Support cable detection, Ping detection, and Tracert detection operations, making analyzing the failed grid nodes easy.
- Support LLDP, which is convenient for the network management systems to query and judge the communication status of the link.
- Supports CPU monitoring, memory monitoring, Ping detection, Tracert detection, and cable detection.

Technical Specifications

Model	CMS3200-8P2S	CMS3200-16P2C	CMS3200-24P4C
Port configuration	8x 10/100/1000M RJ45 2x 1G SFP 1x Console	16x 10/100/1000M RJ45 2x 1G Combo 1x Console	24x 10/100/1000M RJ45 4x 1G Combo 1x Console
Switch capacity	20Gbps/non-blocking	36Gbps/non-blocking	56Gbps/non-blocking
Forwarding rates	41.6 Mpps	26.7Mpps	41.6Mpps
MAC Address	8k		
Buffer Space	4M		
Jumbo Frame	10Kb		
PoE	IEEE802.3af/at, PIN: 1/2+, 3/6-		
Input voltage	100~240Vac 50/60Hz (Rated); 90~264Vac 47Hz~63Hz (Max.)		
Power Consumption	<10W (excluded PoE)	<15W (PoE)	
Power Protection	Under-voltage/over-voltage, over-current, overload, and over-temperature protection		
Heat dissipation	Natural	Fans @6000RPM	Fans @6000RPM
Noise	/	<31dB	
Working Temperature	-20ºC ~ 60ºC		
Storage Temperature	-40ºC ~ 85ºC		
Relative Humidity	5-95% (no condensation)		
Installation	Rack-mounted 1U 19"		
Dimension	266x200x43.6mm	440x270x43.6mm	
Safety, EMC	Safety: EN60950, GB4943 EN 55022 Class A, FCC Part 15 Subpart B Class A IEC 61000-3-2 CLASS A, IEC 61000-3-3 CLASS A IEC 61000-4-2 Contact: ±6kV, Air: ±8kV Class A IEC 61000-4-4 Level4 IEC 61000-4-5 Power: Com ±6KV, Diff. ±6KV; UPT: Com ±4KV, diff.±2KV		

Software Feature

General	
Spanning Tree	STP/RSTP/MSTP, Auto Edge Port，BPDU Filtering, Self Loop Detection
Link Aggregation	IEEE 802.3ad LACP,Static Trunk, Max. 8 Ports/Group, Traffic Load Balancing
Loopback detection	support
ERPS	support
PoE Management	Port configure, PoE Timer
VLAN	
Voice VLAN	Static VLAN，Port-based，IEEE 802.1Q Tagged-based，Protocol-based，MAC-based，OUI Mode (Auto/Manual)
Surveillance VLAN	OUI Mode (Auto/Manual)
QinQ	IEEE 802.1ad Basic
GVRP	supported
Multicast	
Basic	Multicast Groups，Immediate Leave,Static/Forbidden Router Port，Static/Forbidden Forward Port，Filtering，Throttling
IGMP Snooping	IGMP v1/v2，IGMP v3 Basic (BISS)，IGMP v2/v3 Querier
MLD Snooping	MLD v1/v2
MVR	Multicast VLAN Registration
QoS	
Priority Queue	8 queues/port
Queue Scheduling	WRR, WFQ, Strict Pripority, Hybrid(WRR+SP or WFQ+SP
Class of Service	Port-based, 802.1p, IP TOS Precedence, IP DSCP
Trusted QoS	supported
Rate Limit	Port-based (Ingress/Egress)
ACL	Access Control List, L2/L3/L4, MAC-based, IPv4/IPv6-based
Access Rules	supported/1024
Security	
AAA	Authentication
TACACS+	supported/8
RADIUS	supported/8
Authentication	IEEE 802.1X, MAC/Web/Guest VLAN/Port-Based/Host-Based
Account Management	support

Access Management	support
SSL/TLS	SSLv2, SSLv3, TLSv1
WebUI	HTTPS
CLI	SSH v1/v2
Port Security	Dynamic Lock/256
Storm Control	Broadcast, Unknown Multicast, Unknown Unicast
Spanning Tree	BPDU Guard
Port Isolation	Supported
Black Hole MAC	Supported
CPU Defence Engine	Supported
DoS Prevention	Supported
DHCP Snooping	Option 82
Dynamic ARP Inspection	Supported
IP Source Guard	Supported/256
IMPB	IP/MAC/Port Binding
IPv6	
IPv6 Host	Auto Configuration, Static IPv6 Address and Prefix Length Static IPv6 Default Gateway,IPv6 Neighbor Discovery (ND) IPv6 Duplicate Address Detection, ICMPv6
IPv6 Application	HTTP/HTTPS, Telnet, SSH, SNMP, TFTP, Syslog, Ping, DHCPv6
Management	
CLI	Console, Telnet
HTTP	support
SNMP	v1/v2cv3
File Management	Firmware Upgrade/Backup, Dual Images, Configuration Download/Backup, Multiple Configurations
Upload/Download	TFTP, HTTP, UART
Time Management	Local, SNTP
Port Management	Friendly Port Name (Port Description),Error Disabled Recovery
Line Management	Console, Telnet, SSH v1/v2
DHCP	Client, Snooping, Server, Relay, option82
DNS	Client
EEE	IEEE802.3az
RMON Management	32 entries
Discovery	

LLDP	IEEE 802.1AB Link Layer Discovery Protocol
LLDP-MED	ANSI/TIA-1057 LLDP Media Endpoint Discovery
Diagnostics	
Mirroring	Port-based (Many to One)
Syslog (RFC3164)	Local RAM, Local Flash, Remote Server
System Diagnostics	CPU, Memory, Port Utilization
Port Diagnostics	Cable Test, Fiber Module Status
Network Diagnostics	Ping Test, Traceroute
UDLD	supported
MIB	
RFC1213 MIBII	MIBII System & Interface groups
RFC2819	RMON I (1,2,3, & 9 groups)
RFC1215	Generic Traps
RFC1493	Bridge
RFC2674	Bridge MIB Extensions
RFC2737	Entity
RFC3635	Ethernet-Like
RFC2863	Interface Group
SNMP-Community-MIB	supported
SNMPv3	supported

Order Information

Model No.	Description
CMS3200-8T2S-AC	L2+, 8x 10/100/1000M RJ45, 2x 1Gb SFP, AC input
CMS3200-8P2S-AC	L2+, 8x 10/100/1000M RJ45 (PoE), 2x 1Gb SFP, AC input 150W
CMS3200-16T2C-AC	L2+, 16x 10/100/1000M RJ45, 2x 1Gb Combo, AC input
CMS3200-16P2C-AC	L2+, 16x 10/100/1000M RJ45 (PoE), 2x 1Gb Combo, AC input 280W
CMS3200-24T4C-AC	L2+, 24x 10/100/1000M RJ45, 4x 1Gb Combo, AC input
CMS3200-24P4C-AC	L2+, 24x 10/100/1000M RJ45 (PoE), 4x 1Gb Combo, AC input 400W
*DC input, AC+DC input customized	

Related Products

Model	Description
SFP Module	
SFP-M1285L-05	1.25G MM 850nm LC 550m DDM
SFP-S1213L-20	1.25G SM 1310nm LC 20km DDM
SFP-B1235L-20	1.25G SM TX1310/RX1550nm LC 20km DDM
SFP-B1253L-20	1.25G SM TX1550/RX1310nm LC 20km DDM
Long distance 40/60/80/100/120km is available	

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