5100-POE Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.

5110GX2-POE

5118GX2-POE

5128GX4-POE

5100-POE Series Full Gigabit POE switch

The 5100-POE series switches are a new generation of intelligent access switches developed by AVCOMM for carrier resident networks and enterprise networks. The 5100-POE series is based on the new-generation high-performance hardware and the software platform with the independent intellectual property rights of AVCOMM. It supports powerful functions such as ACL, QinQ, and QoS. Its simple and rich management mode and flexible installation mode enable the series products to meet the access requirements of various complex scenarios. 5100-POE series POE switches come in 5110GX2-POE, 5120GX4-POE, and 5128GX4-POE models, meeting the access requirements of different networks.

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Carrier-class Ethernet access switch
- Support carrier-class Ethernet ring network protection protocol, protection switching time <50ms; It also supports simple and efficient redundancy protection mechanisms such as STP/RSTP, dual-uplink active/standby link protection, and LACP link aggregation, meeting users' requirements for high reliability.
- The powerful ACL function supports data access and control at layer L2 to Layer L7, providing users with flexible policy control methods.
- The in-service Software Upgrade (ISSU) Service does not interrupt system upgrades, ensuring uninterrupted forwarding of user data during system upgrades.
- Supports various Layer 2 multicast functions, including IGMP-snooping, quick user logout, and cross-VLAN multicast replication.

Rich QoS policies
- It classifies complex traffic based on VLAN, MAC, source address, destination address, IP protocol, and priority and re-marks priorities, providing a reliable and effective means for service optimization.
- Provides flexible bandwidth control policies and supports port-based or stream-based rate limiting to ensure line speed forwarding on each port, effectively ensuring the quality of network services.
- Supports multiple queue scheduling algorithms, such as SP, WRR, and SP+WRR.

Perfect security mechanism
- Device-level security defense: Advanced hardware architecture design, the hardware implements hierarchical packet scheduling and protection, supports the defense against DoS, TCP SYN Flood, UDP Flood, broadcast storm, and heavy traffic attacks. Hierarchical command line protection is supported. Users at different levels have different management rights.
- Complete security authentication mechanism: supports IEEE 802.1x, Radius, and Tacacs+ to provide a complete security authentication mechanism for users.
- Supports the suppression of broadcast, multicast, and unknown unicast packets, ensuring the normal operation of the device in bad network conditions.
- The perfect loop detection mechanism can ensure the stable operation of the network for a long time.
- Security features such as port isolation on the same VLAN, DHCP-snooping, and IP+MAC+ port binding further ensure user data security.

Perfect POE power supply function

- It supports 802.3AF/AT standards and built-in high-power power supply. No external power supply is required. It can support 24-port AF full load power supply.
- POE power supply is not interrupted during the hot restart of the entire device.
- If the power supply is insufficient, you can set a priority for power supply ports. A high priority gives priority to power supply to ensure important services.
- POE ports and power supply surge protection up to 2KV.

Flexible and convenient management and maintenance

- Supports multiple management modes, such as Console, Telnet, and SSH.
- Supports WEB management, which is simple and efficient, and facilitates installation and debugging by engineering and maintenance personnel.
- Supports file upload and download management through TFTP.
- In-service Software Upgrade (ISSU) Service without interrupting system Upgrade.
- It supports the standard SNMP protocol and works with our "ANMS" intelligent network management platform to realize automatic device discovery, network topology management, device configuration management, performance data statistics and analysis, fault management and other functions, simplifying network management and providing users with a brand new experience.

Ordering Information

Model Name	Description
5110GX2-POE	Ethernet POE switch (one Console port, 8 gigabit POE ports, 2 gigabit optical ports, standard AC220V power supply, 150W POE power, fan heat dissipation, 1U height, desktop installation)
5118GX2-POE	Ethernet POE switch (one Console port, 16 gigabit POE ports, 2 gigabit optical ports, standard AC220V power supply, 300W POE power, fan heat dissipation, 1U height, desktop installation)
5128GX4-POE	Ethernet POE switch (one Console port, 24 gigabit POE ports, 4 gigabit optical ports, standard AC220V power supply, 400W POE power, fan heat dissipation, 1U height, desktop installation)

Model	5110GX2-POE	5118GX2-POE	5128GX4-POE
Exchange capacity	350Gbps/3.5Tbps		
Packet forwarding rate	64Mpps/96Mpps	96Mpps/108Mpps	132Mpps/144Mpp s
Dimension	280*179*45	440*232*45	440*232*45
Power consumption	<30W	<45W	<45W
POE power	150W	330W	400W
POE/POE+	support	support	support
Power	AC：100V-240V，50Hz±10% DC：36~72V （POE models do not have DC power supply）		
Operating Temperature & Humidity	Working temperature/humidity：0℃-50℃，10%-90%Non- Condensing Storage temperature/humidity：-20℃-70℃；5%-95%Non- Condensing		
Mac swap	Support static configuration and dynamic learning of MAC address Supports viewing and clearing MAC addresses MAC address aging time is configurable Support MAC address learning quantity limit Support MAC address filtering function		
VLAN	Supports 4K VLAN entries Support GVRP Support QinQ Support Private VLAN Support voice vlan		
STP	Support 802.1D (STP), 802.1W (RSTP), 802.1S (MSTP) Support BPDU protection, root protection, loop protection		
Multicast	Support IGMP v1/v2/v3 Support IGMP Snooping Support IGMP Fast Leave Support multicast group policy and multicast group quantity limit Support replication of multicast traffic across VLANs		
QoS	Support traffic classification based on fields in THE L2, L3, and L4 protocol headers Support CAR traffic limiting Support 802.1P/DSCP priority re-marking is supported Support queue scheduling modes such as SP, WRR, and SP+WRR Support tail-drop and WRED congestion avoidance mechanisms Support traffic policing and traffic shaping		
Safety features	SupportACL traffic identification and filtering mechanisms based on L2, L3, and L4 Support the defense against DDoS attacks, TCP SYN Flood attacks, and UDP Flood attacks Support the suppression of multicast, broadcast, and unknown unicast packetsPort isolation Support Port security and IP+MAC+ port binding DHCP SOOping and DHCP Option82 Support IEEE 802.1x authentication Support Radius and Tacacs+ authentication Support Hierarchical command line protection		

Reliability	Support link aggregation in static or LACP mode
	Support EAPS and ERPS Ethernet ring protection protocols
	Support ISSU services without interrupting system upgrade
Management and maintenance	Support Console, Telnet, SSH 2.0
	Support ZTP Zero Touch Provisioning
	Support browser-based WEB management
	Support SNMP v1/v2/v3
	Support file upload and download management in TFTP mode
	Support for RMON event history
	Support traffic statistics analysis such as sFLOW

100Base FX

Multi mode	AVC-SFP-FX-SX （550m）	Wavelength: 850 nm
	AVC-SFP-FX-S （2km）	Wavelength: 1310 nm
Single mode	AVC-SFP-FX-10 (10km)	Wavelength: 1310 nm

1000Base FX

Multi mode	AVC-SFP-SX （550m）	Wavelength: 850 nm
	AVC-SFP-LX-S （2km）	Wavelength: 1310 nm
Single mode	AVC-SFP-LX-10 (10km)	Wavelength: 1310 nm