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TR-S2500-POE Series

S2500-P Gigabit Ethernet POE Switch

Product Overview

TR-S2500-POE Series is a new-generation smart access switch designed for carrier's IP MAN and enterprise networks. Based on the new-generation high-performance hardware and TRROS platform, it supports functions such as ACL, QinQ and QoS.

TR-S2500-POE Series have 4 models: TR-S2510-P, TR-S2518-P, TR-S2528-P and TR-S2528-P-800

Product Characteristics

➢ **Carrier-Class Ethernet Access Switch**

➢ TR-S2500-POE Series supports the telecom-level Ethernet-ring protection protocol with a protection shift time of less than 50ms, STP/RSTP/MSTP, backup of active and standby uplinks, and LACP link aggregation to cater to the requirements of high reliability of carriers;

➢ TR-S2500-POE Series has powerful ACL functions to access and control L2-L7 data, providing carriers flexible and various policy control methods;

➢ TR-S2500-POE Series supports ISSU (In-Service Software Upgrade), which guarantees the user data non-stop forwarding when the system is upgrading;

➢ TR-S2500-POE Series supports various L2 multicast function, including user fast-leave mechanism and cross VLAN multicast replication function.

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➤ **Rich QOS Policies**

➤ TR-S2500-POE Series supports complex traffic classification based on VLAN, MAC, source address, destination addresses, IP protocols and priorities. It also supports priority remark. These functions provide an effective way for users to optimize their businesses.

➤ TR-S2500-POE Series provides with flexible bandwidth control policies, supporting port-/flow-based flow limit and ensuring the line speed forwarding of each port to make sure the high quality of video, audio and data services

➤ TR-S2500-POE Series also supports multiple queue grooming algorithms such as SP, WRR or SP+WRR.

➤ **Comprehensive Ipv6 Solutions**

➤ TR-S2500-POE Series supports the IPv6 protocol suite, IPv6 neighbor discovery and ICMPv6.

➤ TR-S2500-POE Series supports IPv6 based Ping, Traceroute, Telnet and SSH, meeting the need of IPv6 network equipment management and service control.

➤ **Comprehensive Security Mechanism**

➤ TR-S2500-POE Series adopts advanced hardware architecture design, realizing the hierarchical scheduling and protection of the packet. It provides multiple security measures to defend against attacks from SYN Flood, UDP Flood, broadcast storm and mass flow of DOS or TCP. It also supports command line authority control based on user levels.

➤ Comprehensive Security Certification: S2500 Series complies with IEEE 802.1x, Radius and TRTacacs+.

➤ TR-S2500-POE Series supports the suppression of broadcast, multicast and unknown unicast packet, ensuring the equipment can operate normally in harsh network conditions.

➤ TR-S2500-POE Series has the perfect loop detection mechanism.

➤ TR-S2500-POE Series supports the port isolation in a same VLAN, DHCP-Snooping and IP+MAC+ port binding.

➤ **Convenient Management and Maintenance**

➤ TR-S2500-POE Series supports multiple management styles such as Console, Telnet and SSH.

➤ TR-S2500-POE Series supports WEB based management. The management is more simple and effective.

➤ TR-S2500-POE Series supports upload and download of TFTP files.

➤ TR-S2500-POE Series supports ISSU (In-Service Software Upgrade).

➤ TR-S2500-POE Series supports SNMP. By cooperating with Techroutes smart NMS, functions including the equipment auto-discovery, the topology management, the equipment configuration management,

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the performance data analysis, and fault management can be realized. In this way, the network management is simplified and the user gets a new product experience.
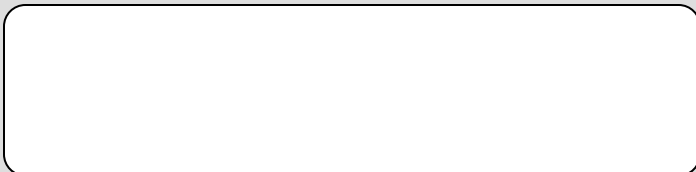
Technical Specifications

TR-S2500-POE Series				
Item	TR-S2510-P	TR-S2518-P	TR-S2528-P	TR-S2528-P-800
Switching capacity	20Gbps	64Gbps	64Gbps	64Gbps
Forwarding rate	15Mpps	27Mpps	42Mpps	42Mpps
Dimensions mm (W×D×H)	340x200x44	442x315x44	440×280×44	440×280×44
Power consumption	<30W	<45W	<45W	<45W
Power supply	AC: 100V-240V, 50Hz±10%			
	DC: -36V~-72V (The POE switch here doesn't support DC power supply)			
Environment	Operating temperature/humidity: 0℃-50℃, 10%-90% non-condensing			
	Storage temperature/ humidity: -20℃-70℃; 5%-95% non-condensing			
MAC switching function	Static configuration and dynamically learning of MAC address			
	Check and delete MAC address			
	Configuring of MAC address aging time			
	Limit on MAC address learning number			
	MAC address filtering function			
VLAN	4K VLAN entries			
	GVRP			
	1:1 and N:1 VLAN Mapping			
	QinQ			
	Private VLAN			
STP	802.1D (STP), 802.1W (RSTP), 802.1S (MSTP)			
	BPDU protection, root protection and ring protection			
Multicast	IGMP v1/v2/v3			
	IGMP Snooping			
	IGMP Fast Leave			
	Multicast group policy and multicast number limit			
	Multicast traffic cross VLAN duplication			
IPv4	Static routing			
IPv6	ICMPv6, DHCPv6 and IPv6 Telnet			
	IPv6 Neighbor Discovery			
	MLD v1/v2			
	MLD Snooping			
QoS	Traffic classification of each field of L2/L3/L4 protocol headers			

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	CAR traffic control
	802.1P/DSCP priority remark
	Multiple queuing algorithms such as SP, WRR or SP+WRR
	Tail-Drop, WRED
	Traffic supervision and traffic shaping
Security features	Identification and filtering of L2/L3/L4 based ACL
	Defend against DDoS attack, SYN Flood attack of TCP or UDP Flood attack
	Suppression of broadcast, multicast and unknown unicast packet
	Port isolation
	Port security, IP+MAC+port binding
	DHCP Snooping, DHCP Option 82
	IEEE 802.1x authentication
	Radius and TRTacacs+ authentication
	Command line authority control based on user levels
Reliability	Static/LACP link aggregation
	EAPS and ERPS(single ring)
	ISSU
Management and Maintenance	Console, Telnet, SSH 2.0
	WEB based management style
	SNMP v1/v2/v3
	Upload and download of TFTP files
	RMON

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Ordering Information

Techroutes S2500-POE Series	
Item	**Description**
TR-S2510-P	Ethernet POE switch with 8 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 8 gigabit POE ports, 2 gigabit SFP ports; the standard AC220V power supply, 150W POE power, the cooling fan, 1U, desk-top installation)
TR-S2510-P-DC	Ethernet POE switch with 8 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 8 gigabit POE ports, 2 gigabit SFP ports; the standard DC36-72V power supply, 150W POE power, the cooling fan, 1U, desk-top installation)
TR-S2518-P	Ethernet POE switch with 16 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 16 gigabit POE ports, 2 gigabit SFP ports; the standard AC220V power supply, 400W POE power; the cooling fan, 1U, standard 19-inch rack-mounted installation)
TR-S2528-P	Ethernet POE switch with 24 gigabit Base-T ports and 4 gigabit SFP ports (1 console port, 24 gigabit POE ports, 4 gigabit SFP ports; the standard AC220V power supply, 400W POE power; the cooling fan, 1U, 19-inch rack-mounted installation)
TR-S2528-P-800	Ethernet POE switch with 24 gigabit Base-T ports and 4 gigabit SFP ports (1 console port, 24 gigabit POE ports, 4 gigabit SFP ports; the standard AC220V power supply, 800W POE power; the cooling fan, 1U, standard 19-inch rack-mounted installation)

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