

TR-S2500-P



Gigabit Ethernet POE Switch Series

Product Overview

TR-S2500-P Series is a new-generation intelligent PoE access switch designed for carrier's IP MAN and enterprise networks. Based on the new-generation high-performance hardware and TROS™ platform, it supports functions such as ACL, QinQ and QoS. Its simple management mode and flexible installation can meet the requirement of any complicated scenarios; TR-S2500-P Series has 4 models: TR-S2510-P, TR-S2520-P, TR-S2528-P and TR-S2528C-P.

Product Characteristics

Carrier-Level Ethernet Access Switch

TR-S2500-P Series supports the carrier-level Ethernet-ring protection protocol with less than 50ms recovery time, STP/RSTP/MSTP, backup uplink ports, and LACP link aggregation to cater to the requirements of high reliability of carriers;

TR-S2500-P Series has powerful ACL functions to access and control L2-L7 data based on physical port, providing carriers flexible and various policy control methods;

TR-S2500-P Series supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade;

TR-S2500-P Series supports various L2 multicast functions such as IGMP-snooping, fast-leave and MVR to fully meet the operation requirements of carrier's IPTV.

Flexible and Convenient Management and Maintenance

TR-S2500-P Series supports many management modes such as the CLI, Telnet, SSH, SSL and SNMP;

TR-S2500-P Series supports the WEB management mode, which is easy and efficient for installing and debugging the device;

TR-S2500-P Series supports FTP, TFTP and SFTP;

TR-S2500-P Series supports ISSU (In-Service Software Upgrade);

TR-S2500-P Series supports SNMP

TR-S2500-P Series supports Zero Touch Provisioning (ZTP) function to minimize manual operator intervention and helps reduce customers' initial deployment costs.

Carrier-Level QoS Policies

TR-S2500-P Series supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services;

TR-S2500-P Series provides flexible bandwidth control policies, supporting port-/flow-based flow limit, ensuring the line speed forwarding of each port;

TR-S2500-P Series supports multiple queue schedule algorithms such as SP, WRR and "SP + WRR";

Perfect Security Mechanisms

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP- related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Perfect security authentication mechanisms: IEEE 802.1x, Radius and Tacacs+.

TR-S2500-P Series supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

TR-S2500-P Series supports perfect ring detection mechanism, ensuring the long-term stable running of network.

TR-S2500-P Series supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.;

Intelligent PoE+

TR-S2500-P Series supports IEEE 802.3AF/AT PoE standard, and power mapping scales up to a maximum of 370W of PoE+ power;

TR-S2500-P Series supports manual and dynamic PoE power allocation;

TR-S2500-P Series supports up to 4KV thunder-proof of the PoE port and power supply;

Technical Specifications

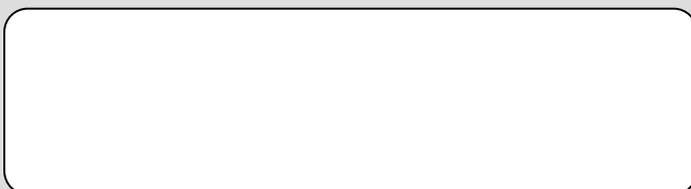
Items		TR-S2510-P	TR-S2520-P	TR-S2528-P	TR-S2528C-P
Interface		8xGE TX POE+	16xGE TX POE+	24xGE TX POE+	24xGE TX POE+
		2xGE-SFP	4xGE-SFP	4xGE-SFP	4xGE Combo (TX/SFP)
Console		1xRJ45, 1xRST Button	1xRJ45, 1xRST Button	1xRJ45, 1xRST Button	1xRJ45, 1xRST Button
Backplane (Gbps)		20	56	56	56
Forwarding Rate (Mpps)		15	30	42	42
Chassis	Dimension (WxDxH)mm	280x180x44	440x208x44	440x210x44	440x210x44
	Weight (KG) Empty	1.6	2.2	2.9	3
Package	Dimension (WxDxH)mm	346x289x92	555x295x88	555x295x88	555x295x88
	Weight (KG) Empty	2.4	3.3	3.6	4.1
Power Consumption	No-Load	< 7W	< 15W	< 17W	< 17W
	Full-Load	< 153W	< 260W	< 394W	< 394W
Power Supply	AC: 100V-240V	Support (160W)	Support (270W)	Support (400W)	Support (400W)
POE Power Budget		140W	240W	370W	370W
POE/POE+		Support	Support	Support	Support
Total output BTU (1000BTU/H=293W)		520.47	880	1365.19	1365.19
Fan number		/	2	2	2
Noise@25°C(dBA)		0	45	45	45
MTBF(H)		> 200,000	> 200,000	> 200,000	> 200,000
Forwarding mode		Store-forward	Store-forward	Store-forward	Store-forward
Flash (MB)		16	16	16	16
DRAM (MB)		128	128	128	128
MAC		8K	8K	8K	8K
Buffer size (MB)		2	2	2	2
Jumbo frame		9K	9K	9K	9K
Total SVI		10	10	10	10

VLAN	4K Active VLAN
	GVRP
	QinQ and Selective QinQ
	Private VLAN
	Voice VLAN
Spanning Tree	802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP)
	BPDU guard, root guard and loopback guard
Multicast	IGMP v1/v2/v3
	IGMP snooping
	IGMP Fast Leave
	MVR
	IGMP Filter
IP	Static route
	RIP, OSPF
	128 Routing Tables
	IPv4/v6 dual stack
QoS	CAR, HQOS
	MAC/IP/TCP/UDP/VLAN/ COS/ DSCP/ TOS based QoS
	802.1P/DSCP priority re-labeling
	SP, WRR, and "SP+WRR"
	Tail-Drop and WRED
	Flow monitoring and Traffic shaping
Security features	Port isolation
	Port security, and "IP+MAC+port" binding
	MAC sticky DAI & IP source guard, PPPoE+
	IEEE 802.1x, Radius, Tacacs+ authentication
	L2/L3/L4 ACL flow identification and filtration Anti-attack from DDoS, TCP's SYN Flood, UDP Flood etc.
	Broadcast/multicast/unknown unicast storm-control
	MD5, SHA-256, RSA-1024, AES256 etc.
DHCP	DHCP server/relay/client
Reliability	Static/LACP link aggregation
	Interface Backup
	EAPS and ERPS
	ISSU uninterrupted system upgrade
Management	Console, Telnet, SSH, HTTP, HTTPS, RMON
	SNMP v1/v2/v3
	TFTP, FTP, SFTP
	NTP
	ZTP
	Syslog
	SPAN, RSPAN
Environment	Operating temperature/humidity: -10°C -50°C ,10%-90% non-condensing
	Storage temperature/humidity: -20°C -70°C, 5%-95% non-condensing

Ordering Information

Techroutes S2500-P Series	
Item	Description
TR-S2510-P	8-Port Gigabit PoE+ 2-Port Gigabit SFP Managed PoE Switch (AC 220V power supply, 140W PoE budget, fanless, 1U, desktop/rack-mounted installation)
TR-S2520-P	16-port Gigabit PoE+ 4-port Gigabit SFP PoE Switch (standard AC 220V power supply; 240W PoE budget, fan cooling, 1U, 19-inch rack mounted installation)
TR-S2528-P	24-Port Gigabit PoE+ 4-Port Gigabit SFP Managed Switch (single AC-220V power supply, 370W PoE budget, fanless, 1U, standard 19-inch rack-mounted installation)
TR-S2528C-P	24-Port Gigabit PoE+ 4-Port Gigabit RJ45/SFP Combo Managed Switch (single AC-220V power supply, 370W PoE budget, with cooling fan, 1U, standard 19-inch rack-mounted installation)

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