Techroutes
N E T W O R K

TR-MS2928-P
10Gigabit Ethernet POE Switch

Product Overview

TR-MS2928-P is a Layer 2+ highly reliable managed switch, which features 24-port 10/100/1000Base-T RJ45 and 4*1G/2.5G/10G SFP ports. It supports Layer 3 static routing with a high-performance switching architecture and offers wire-speed transportation capability for delivering a cost-effective Gigabit Ethernet solution to meet the converged applications for enterprise customer's networks. More and more corporations are adapting new IT technologies over the network such as voice over IP, video conference to improve productivity and save operation expenditure. The TR-MS2928-P provides comprehensive end to end QoS as well as flexible and rich management, security settings, which can meet the high speed, secure and smart requirement for small and medium-size enterprise networks based on cost effective price.

Product Characteristics

Layer 3 routing features: Supports static routing

Port aggregation: Supports GE ports, 2.5GE port and 10GE port aggregation, static and dynamic aggregation

VLAN: Supports access, trunk, hybrid mode and VLAN classification, including the Mac based VLAN, IP based VLAN and protocol based VLAN

QinQ: Supports port-based, VLAN-based and flow-based QinQ

Port Mirroring: Many to one port mirroring

Layer 2 ring network protocol: Supports STP, RSTP, MSTP, G.8032 ERPS protocol, single ring, sub ring

Multicast: Supports IGMP V1, V2, V3 and IGMP snooping

QoS: QoS class, remarking, Supports SP, WRR queue scheduling, Ingress/Engress port-based rate-limit and policy-based QoS

Security: Support Dot1x, port authentication, mac authentication, RADIUS; Support port-security, ip source guard, IP/Port/MAC binding, arp-check and ARP packet filtering for illegal users and port isolation

Management: Supports LLDP, user management and login authentication; SNMPV1/V2C/V3; web management, HTTP, HTTPS; Syslog and alarm grading; RMON （Remote Monitoring） alarm, event and

history record; NTP, Ping, Tracert and optical transceiver DDM function; Supports TFTP, Telnet, SSH and IPv6 Management

Centralized Cloud Managed: The Megh Cloud Management System is built for scale. Whether you're managing a few switches or a vast multi-site infrastructure, you can do it all from a single, centralized dashboard. Seamlessly integrate with your existing Megh network.

Firmware update, configure backup/restore through Web GUI, FTP and TFTP

Technical Specifications

| Model	TR-MS2928-P
Fixed ports	24*10/100/1000M RJ45 ports,4*1G/2.5G/10G SFP+ slots
Switching capacity	128Gbps
Packet forwarding rate	95Mpps
Console port	1
Flash	512M
RAM	512M
MAC address table	16K
Jumbo Frame	10K
Buffer Size	12M bit
Total output BTU (1000BTU/H=293W)	1445.84
Noise@25°C(dBA)	<35db
MTBF(H)	＞200,000
FAN	Fan speed control
Dimension (WxDxH)mm	440x245x44, Rack Mountable
Weight (KG)	3.3
Power Supply	220V AC input Rated voltage range： 100-240V Frequency： 50/60Hz
Power Consumption No-Load	≤30W
Power Consumption Full-Load	≤430W
POE Power Budget	≤400W
POE (IEEE802.3af)/POE+ (IEEE802.3at)	Support
Operating & Storage temperature	0°C~50°C & -20°C~75°C
Working & Storage relative humidity	10%~90% & 5%~95%
Forwarding mode	Store-forward
Port aggregation	10GE port aggregation 2.5GE aggregation GE aggregation Static aggregation Dynamic aggregation
Port features	IEEE802.3x flow control Interface counters Port isolation Storm control Network storm suppression based on port bandwidth

	percentage
Mac-address table management	Static Mac-address management Dynamic Mac-address Management Filtering Mac-address MAC limit based on port and VLAN MAC flapping based on port and VLAN
VLAN	4K, Access, trunk and hybrid mode
VLAN Classification	Mac Based VLAN IP Based VLAN Protocol Based VLAN
GVRP	Normal mode Fixed mode Forbidden mode
QinQ	Port-based QinQ VLAN-based QinQ Flow-based QinQ
LLDP	LLDP (Link Layer Discovery Protocol)
Port mirroring	Many to one (Port Mirroring)
Layer 2 ring network protocol	STP RSTP MSTP
G.8032	G.8032 ERPS protocol， single ring, sub-Ring and major ring Recovery time ≤20ms
Loop Detect	Detect based on ports Detect based on ports and VLAN
Multicast	IGMP Fast Leave IGMP snooping IGMP V1, V2, V3
IP	IPv4 Static Route ARP Table Aging
IPv6	IPv6 Management IPv6 static routing ICMPv6 and IPv6 Telnet IPv6 neighbor discovery Path MTU discovery
DHCP	DHCP Server DHCP client DHCP snooping trust port Remote-id/circuit-id configuration DHCP option-82
ACL	IP Standard ACL MAC extend ACL IP extend ACL IPv6 ACL
QoS	QoS Class, remarking SP, WRR queue scheduling Ingress port-based rate-limit Egress port-based rate-limit

Your Route to The Destination

	Policy-based QoS
Security	Port Security, Dot1x, port authentication, MAC authentication, RADIUS, TACACS, ARP Source Guard, IP Port/MAC binding, ARP-check and ARP packet filtering for illegal users
Centralized Cloud Managed	The Megh Cloud Management System is built for scale. Whether you're managing a few switches or a vast multi-site infrastructure, you can do it all from a single, centralized dashboard. Seamlessly integrate with your existing Megh network
Management and maintenance	User management and login authentication Console Telnet SSH Web management, HTTP, HTTPS SNMPV1/V2C/V3 Syslog and alarm grading RMON NTP Sflow Temperature monitoring Ping, Tracert Cable detection Dying gasp DDM TFTP Dual partition management

Ordering Information

Techroutes TR-MS2928-P Series	
Item	**Description**
TR-MS2928-P	Layer 2 Ethernet switch with 24xGE POE ports and 4xG/2.5G/10G SFP+ ports 1 console port, 220VAC power supply,400W POE Power, Rack Mountable)

CE FC RoHS
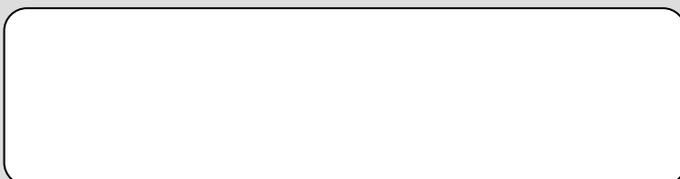
For More details:
visit: www.techroutes.com
Or contact
sales@techroutes.com
info@techroutes.com

Your Route to The Destination