

TSR-3900-06



10G Multiservice Switching Router

Product Overview

TSR-3900-06 is a multi - service converged gateway product specially designed and developed by Techroutes Network after in-depth research on the Internet access needs of typical ICT scenarios such as enterprises, parks, hotels, schools, hospitals, and chains.

TSR-3900-06 is designed based on ARM multicore processor and 10G non-blocking switching platform, and developed with the concept of separation of control and forwarding planes, which can provide high-performance and high-efficiency product experience. This product is equipped with Techroutes new generation of independent intellectual property TROS™ system, which provides users with practical functions such as NAT high-speed Internet access, policy routing, QoS flow control, users 'behavior management, etc. It also supports wireless management, user authentication, network security, cloud management and other value-added service modules, which is an ideal choice for all kinds of enterprise users to form networks.

Main Characteristics

Powerful processing performance

TSR-3900-06 series is built with a high-performance processor based on a 64-bit ARM architecture, which can provide a maximum throughput of 10Gbps. It is equipped with a new generation of TROS™ network operating system, which supports the separation of forwarding and control planes, ensuring a robust kernel while improving forwarding efficiency, meeting the massive data throughput requirements of large-capacity user concurrent scenarios. functions.

Excellent reliability

TSR-3900-06 series converged gateways support hot standby, link backup, power supply and other key component redundancy features, providing users with carrier-level reliability assurance.

Provides 6KV lightning and surge protection for Ethernet ports and power supplies; supports temperature and fan monitoring and active alarm capabilities. Supports dual Flash independent storage design, which can quickly recovery from “bricked” due to user’s misoperation or other extreme situations, greatly reducing the impact of abnormal network interruptions and greatly improving the feasibility of remote operation and maintenance.

A useful collection of features

In addition to network interconnection and Internet access, TSR-3900-06 also provides a large number of practical features that can meet diverse management needs with fewer devices.

Supports integrated design of routing, switching, wireless controller and security, reduces the number of network elements, and reduces topology complexity and TCO costs.

It supports simultaneous access of multiple lines and provides load balancing strategies in various modes such as backup, overlay, and intelligence to fully improve the utilization rate of bandwidth resources.

Supports QoS queue and flexible rate-limit technology to ensure the reasonable allocation of precious bandwidth resources in multi-user concurrent scenarios.

Supports DPI deep application identification to ensure smooth operation of key businesses and prohibition of unauthorized businesses, thereby improving users' network security and operational efficiency.

It supports wireless controller and Portal authentication functions, supports centralized management of APs and seamless roaming, realizes wired and wireless integration, and contributes to the full integration and centralized management of enterprise office networks.

Built-in practical firewall functions and anti-attack modules ensure safe network operation.

Flexible wide area networking

The TSR-3900-06 series supports multiple deployment modes such as routing, gateway and transparent bridge.

It supports multiple VPN technologies such as L2TP/ PPTP, GRE, IPSec, SSL, etc., and can provide users with a secure, controllable and cost-effective solution for remote branch networking.

Supports IPv6 protocol, supports IPv6/v4 dual stack, 6to4 tunnel, translation and other working modes to ensure IPv4/v6 transition networking.

Supports static routing, PBR policy routing, RIP, RIPng, OSPF, OSPFv3, BGP, BGP+, ISIS dynamic routing, etc. It has a rich routing protocol that can meet the networking needs of various complex WAN scenarios and is perfectly compatible with the equipment of mainstream manufacturers in the industry.

Supports multicast routing protocols such as IGMP, PIM-SM/SSM and MLD.

Technical Specification

Model	TSR-3900-06
Interface	
Console	1
USB2.0	1
WAN	1x10G SFP+ & 1x10G SFP+/2.5G RJ45 combo Ports
LAN	4xGigabit Ethernet Ports
RST	1
Performance	
Throughput	2MPPS
Flash	8GB
DRAM	2GB
Power Supply	100-240VAC
Software Features	
WAN	Static IP, DHCP and PPPoE
	Multi-line WAN access
	Intelligent load balance based on equivalent routing, weight, etc.
NAT	NAT/PAT address Translation based on IP, port and address pool
	ALG and DMZ functions
	Global and per-IP connection limits
Traffic Shape	Flow classification based on IP, UDP/TCP ports and QoS queue scheduling function
	Flexible bandwidth control strategies based on user groups and time periods
	Blacklist and whitelist functions
IPv4	Static routing and default routing
	RIP, OSPF, BGP, ISIS, etc.
	PBR policy routing
	Floating routing backup, Keepalive, BFD and other remote detection functions
IPv6	IPv6/v4 dual stack
	V4/V6 tunnel and translation technology
	IPv6 RIPng, OSPFv3, BGP+, etc.
Multicast	IGMP, SM/SSM, MLD and other multicast routing protocols
IP Services	DHCP server, relay and client
	Option43, 60, 82, etc.
	DNS and DDNS
	FTP and TFTP
Security	IP, MAC ACL and firewall security policies
	L2TP/PPTP, IPSec, GRE

		ARP Scan, DHCP Snooping and other ARP anti-spoofing functions
		Anti-Flood, Ping of Death, Tear-drop, WinNuke, Smurf and other attack protection
Converged Functions		Built-in wireless controller function
		Wireless AP management
		Seamless roaming
		Built-in Portal server
		Authentication functions based on SMS, card coupons, Radius.
		Internet behavior management, allowing users to block common apps and applications with one click
		Layer 2 and Layer 3 switching,802.3 protocol, 802.1Q VLAN, Rate-limit
Management		Web GUI management and quick start wizard
		Efficient command line configuration tools such as CLI, Telnet, SSH.
		Network management protocols such as SNMP and MQTT
Appearance		
Chassis	Dimensions mm (WxDxH)	280x180x44
Environmental Specifications		
Operating	Temperature	0°C~45°C
	Humidity	5%~95% (non-condensing)
Storage	Temperature	-40°C~85°C
	Humidity	10%~95% (non-condensing)

Order Information:

TSR-3900-06	1 Console, 1 USB 2.0, 1-Port 10G SFP+ 1-Port 10G SFP+/2.5G RJ45 combo WAN, 4-Port Gigabit RJ45 LAN; AC-220V power supply
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