TSR-2900-10B

Multiservice Switching Router

Product Overview

Techroutes TSR-2900-10B is the next-generation multi-functional switching router switching engine. It is a well-adapted router.

Techroutes TSR-2900-10B has supports the full switching function, USB2.0 expansion, service expansion and engineering maintenance.

Techroutes TSR-2900-10B is equipped with TROS operating system, of which Techroutes has the independent intellectual property right. Techroutes TSR-2900-10B builds a real multiservice broadband platform by providing rich software functions such as routing, switching, safety, VPN.

With its strong processing, rich software functions and hardware modules, Techroutes TSR-2900-10B Series meet requirements of the government, financial institutions, the defense system, operators and enterprises in network construction.

Main Characteristics

Powerful   Performance

Techroutes TSR-2900-10B is driven by the 64-bit dual-core processor with specialized gigabit ASIC switching chip and FPGA components, which enables the whole hardware platform to run on the high-speed Ethernet frame. The innovative design endows TSR-2900-10B with a super processing capability, providing a guarantee for upper-layer software functions.

High Expandability

Because built on the basis of switching core, Techroutes TSR-2900-10B Series can expand their external interfaces without any limitation from the total CPU resources. The switching chip guarantees that the whole Techroutes TSR-2900-10B router is provided with sufficient and broadband internal channels.

Excellent Power-saving ability

Techroutes TSR-2900-10B adopts the new-generation hardware chip in consideration of energy saving while guaranteeing its strong processing capacity. Compared with the mainstream devices in the industry, power consumption of the TSR router is reduced by 15% to 20%, which both reduces the device maintenance cost and accords with the low-carbon idea. Techroutes TSR-2900-10B is also equipped with the environment friendly maglev mute fan.

Various Protocol Support

Techroutes TSR-2900-10B supports Layer 2 link protocols including PPP and dot1q; static routing; policy routing; and dynamic routing such as RIP, OSPF and BGP. These routing protocols are well compatible with the devices manufactured by the mainstream vendors in the industry. Besides, TSR-2900-10B supports integration of multiple services such as routing, switching, voice, safety and wireless, which meets the requirement of complicated network construction.

New Service

Techroutes TSR-2900-10B supports the MPLS characteristics and the MPLS-based layer-2/layer-3 VPN technology, which realize the transparent Ethernet transmission service and the flexible enterprise interconnection. Techroutes TSR-2900-10B Series supports IPv6 data forwarding, routing protocols and multicast routing protocols; Techroutes TSR-2900-10B Series also supports the IPv4/IPv6 protocol stack and the interconnection technology, which makes the existing networks smoothly upgrade to IPv6.

Secure Service Access

Techroutes TSR-2900-10B supports selective ACL firewall filtration technology, NAT, VPNs such as IPSec/L 2TP/PPTP/GRE, and security technologies such as AAA, Radius, PAP/CHAP.

Traffic management policy

Techroutes TSR-2900-10B supports varied queues including FIO, PQ, CQ, CBWFQ, LLQ, WFQ DSCP, IP Precedence, RTS, RSVP and CAR.

Techroutes TSR-2900-10B supports its self-developed traffic control and service management policy (GBSC) which can better real-time arrange and monitor your data traffic.

Techroutes
N E T W O R K

Flexible management and maintenance

Techroutes TSR-2900-10B is convenient in managing and monitoring the network by using the in-band and out-band management tools such as Console, Telnet, SSH and SNMP;

Complete Layer-2 Switching Capacity

Techroutes TSR-2900-10B supports Layer-2 switching with the built-in high performance switching chip. It supports layer-2 protocols including STP/RSTP/MSTP, MAC learning and filter, anti-attack based on the chip, storm control and port mirroring.

Technical Specification

Model		TSR-2900-10B
Interface		
Console		1
USB2.0		1
WAN		2xGE-TX & 2xGE SFP
LAN		8xGE-TX
POE		/
SLOT		/
RST		1
Encryption Engine		Built-in
Performance		
Throughput		3MPPS
Flash		32MB
DRAM		1GB
NAT Concurrent Sessions		<300K
Consumption	**No Load**	≤26W
	Full Load	≤31W
Total output BTU (note:1000 BTU/hr=293W)		105.09
FAN		1
Noise@25°C (dBA)		22
Power Supply		100-240VAC
Software Features		
LAN		ARP, ARP proxy, Gratuitous ARP
WAN		PPP, PPPoE (Client/Server)
Routing		Static route, default route
		RIPv1/v2, OSPFv2, BGPv4,IS-IS
		Fast Switch, Load-Balance
		PBR (Policy Based Routing)
Multicast		IGMP V1,V2,V3

Your Route to The Destination

		PIM-DM, PIM-SM
IPv6		IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL, IPv6 (authenticate through IPv6 Phasell)
		IPv6 QoS
		IPv6 transition: NAT-PT, IPv6 tunnel, 4over6
		IPv6 tunnel: IPSec v6, GRE, 6to4,
		ISATAP
		IPv6 route: IPv6 static route, RIPng, OSPFv3, BGP4+
MPLS		VPLS, MP-BGP, VRF
		L2VPN, L3VPN
IP Service		ICMP, TCP, UDP, IP Option
		NAT, PAT, Port-MAP, Private- Service, ALG
		Ping, Trace Route, Nslookup
		IP ACL, IMP filter, Fast-Access
		DHCP Client/Serv/Relay
		DNS, DNS host, DNS Proxy, DDNS (Peanut HuII/DynDNS/CTC)
		Helper-Address, UDP Helper
		IP unnumber, DDR
		Keep alive, PDP (compatible with CISCO)
		NetFlow, IP Accounting, IP SLA
		TFTP Client/Serv, FTP Client
		SNTP/NTP, job/schedule
		PNP
		ALIAS
		Reverse telnet, VTY binding
Switching		802.1p CoS, 802.IQ VLAN
		STP, RSTP
		Keep alive, port mirror, broadcast/ multicast storm control
		PTP, IEEE1588v2 (Optional)
Network Safety	**AAA**	Authentication, Authorization, Accounting
		enable, local, Radius, Tacacs+
		PAP, CHAP, MS-CHAP
Network Security	**Firewall**	ACL, NAT
		ASPF state detection
		SYN flood, UDP flood or ICMP flood
		ARP attack protection, ARP-SCAN and DHCP-Snooping
		Prevention of Ping of Death, Tear-drop, Land-Based, WinNuke, PingSweep, ARP attack and IP-Spoofing
	VPN	IKE, IPSec, DMVPN, EZVPN
		L2TP, PPTP, GRE, EoGRE
		VPN Stacking

Your Route to The Destination

Reliability	Backup Function	Interface backup
		Route backup
		E-Backup, Keep alive Ethernet remote monitoring
		VRRP, HSRP
		Bandwidth based load sharing and backup
		Traffic based load balancing and backup
	BFD	BFD for RIP, OSPF, BGP, MPLS and VRRP
QOS	Congestion management	FIFO, PQ, CQ, WFQ, CBWFQ
	Congestion avoidance	WRED/RED
	Traffic shaping	GTS (Generic Traffic Shaping)
	Others	GBSC, Layer7filter
	Traffic classification	ACL
		IP Precedence
		DSCP
		MAC
		802.1p
Management		Console, Telnet, SSH,HTTP/HTTPS,SSL
		SNMP V1/V2/V3, SYSLOG, RMON, ZTP

Appearance

Chassis	Dimensions mm (WxDxH)	300x200x44
	Weight (kg,empty)	2.1
Package	Dimensions mm (WxDxH)	400x400x80
	Weight (kg)	3.1

Environmental Specifications

Operating	Temperature	-10°C~50°C
	Humidity	10%~85% (non-condensing)
Storage	Temperature	-40°C~85°C
	Humidity	10%~95% (non-condensing)

Accessories

Console cable, Rack mount kits, Manual

Certificate

CE, FCC, RoHS, ISO

Order Information:

TSR-2900-10B	TSR-2900-10B Multi-service Router (1 Console, 1 USB2.0, 2xGE-TX, 2xSFP, 8xGE-TX LAN Ports, built-in encryption engine, 220V power supply)

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

Your Route to The Destination