

TIR-5200 Series



10G Multiservice Switching Router

Product Overview

Techroutes TIR-5200 series router is the next-generation multi-functional switching router switching engine. It is a well-adapted router. The TIR-5200 series Router is a high-performance Layer 3 routing platform designed for enterprise, service provider, and data center applications.

It supports advanced dynamic routing protocols, high availability, and carrier-grade scalability.

The routing engine delivers robust performance, interoperability, and flexible control suitable for complex network deployments at the edge or core.

Techroutes TIR-5200 series equipped with TROS™ operating system, of which Techroutes has the independent intellectual property right.

Main Characteristics

Powerful Performance

Techroutes TIR-5200 Series is driven by the Quad-core ARM 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 TIR-5200 Series with a super processing capability, providing a guarantee for upper-layer software functions.

Various Routing Protocol

TIR-5200 series supports Layer 2 link protocols including static routing, dynamic routing such as RIP, OSPF and BGP. These routing protocols are well compatible with the devices manufactured in the industry. TIR-5200 series supports multicast PIM-SM/DM routing protocols.

MPLS & IPv6

TIR-5200 series supports the MPLS-based layer-2/layer-3 VPN technology, which realize the transparent Ethernet transmission service and the flexible enterprise interconnection. Techroutes TIR-5200 series also supports the IPv4/IPv6 protocol stack and the interconnection technology.

Security

TIR-5200 series supports selective stateful firewall, ACL filtration technology, Dos protection, NAT, PAT, VPNs such as IPSec/L 2TP/PPTP/GRE, and security technologies such as AAA, Radius, PAP/CHAP.

Traffic management policy

TIR-5200 series supports varied queues including Traffic shaping, RED/WRED, DSCP marking, Bandwidth control.

Management and maintenance

TIR-5200 series 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, NETCONF/YANG, NetFlow/sFlow, Syslog, Interface statistics.

Technical Specification

Model	TIR-5200
Interface	
Console (RJ45)	1
USB Port	1
WAN	3xGE-TX & 2x10GE-SFP+
LAN	8xGE-TX
Performance	
Throughput	20MPPS
Flash	16G
DRAM	8G
Power Consumption	≤25W
Cooling Method	Active cooling
Power Supply	100-240VAC Dual Redundant
Dimension (WxDxH) mm	440*180*45, Rack Mountable (1U)
Software Features	
LAN	ARP, ARP proxy, Gratuitous ARP
WAN	PPP, PPPoE (Client/Server)
Routing	Static route, default route
	BGP multi-instance, IPv4/IPv6, Route Reflector, Communities, Route maps, BGP4+
	OSPFv2/v3 with NSSA, Stub, Virtual Links
	IS-IS Multi-level, IPv4 and IPv6 support
	RIP/RIPng Dynamic routing for small and medium networks
	Route Redistribution Inter-protocol redistribution with route-maps
	Policy Control Prefix lists, Access lists, Route maps
Multicast	IGMP V1, V2, V3
	PIM-DM, PIM-SM
IPv6	IPv6 ND, IPv6 FIB, IPv6 ACL, IPv6 (authenticate through IPv6 Phasell)
	IPv6 route: IPv6 static route, RIPng, OSPFv3, BGP4+
MPLS	VRF multi-tenant routing using VRF-lite architecture
	EVPN VXLAN/EVPN support for data center interconnects
IP Service	MPLS LDP-based MPLS label switching and forwarding
	ICMP, TCP, UDP, IP Option
	NAT, PAT, Port-MAP, Private- Service, ALG

		Ping, Trace Route
		IP ACL, IMP filter, Fast-Access
		DHCP Client/Serv/Relay
		DNS, DNS host, DNS Proxy, DDNS
		NetFlow/Sflow
		TFTP Client/Serv, FTP Client
		SNTP/NTP
Switching		802.IQ VLAN
		LACP
Network Safety	AAA	Authentication, Authorization, Accounting
		Radius
		PAP, CHAP, MS-CHAP
Network Security	Firewall	ACL, NAT, PAT
		Stateful Firewall
		SYN flood, UDP flood or ICMP flood, DoS Protection
		ARP attack protection, ARP-SCAN and DHCP-Snooping
	VPN	IKE, IPSec
		L2TP, PPTP, GRE
Reliability	Backup Function	Interface backup
		Route backup
		VRRP
		Bandwidth Control
QOS	Congestion management	FIFO, PQ, CQ, WFQ, CBWFQ
	Congestion avoidance	WRED/RED
	Traffic classification	ACL
		IP Precedence
		802.1P, DSCP
Management		Console, Telnet, SSH, HTTP/HTTPS, NETCONF/YANG
		SNMP V1/V2/V3, SYSLOG, Virtualization Support
Environmental Specifications		
Operating	Temperature	0°C~50°C
	Humidity	5%~95% (non-condensing)
Storage	Temperature	-20°C~70°C
	Humidity	5%~95% (non-condensing)

Order Information:

TIR-5200	TIR-5200 Multi-service Router (1xConsole, 1xUSB, 3xGE-TX, 2x10GE-SFP+, 8xGE-TX LAN Ports, 220V power supply, 1U Rack Mountable)
-----------------	---

Copyright ©Techroutes Network Pvt Ltd. 2026. All Rights Reserved. This document is Techroutes Network Public Information. Techroutes Network reserves the right to alter, update and otherwise change the information contained in the document from time to time.

**For More details:**visit: www.techroutes.com

Or contact

sales@techroutes.cominfo@techroutes.com