

## LANZONE LZ-T-R2824-02



### Product Overview

LANZONE Router series is the Next-generation Multi Service Switching Router platform, designed for growing customer requirement of real time applications and high bandwidth requirement. The router platform designed with a 64bit multi-core processor with Gigabit Switching integration so that it can give excellent performance up to 2 Mpps.

The Router comes with HIC Slots with a wide range of Modules to achieve user specific interface options. to cater different networking requirements of internet service provider, government, financial institutions, military, enterprises or operators.

### Powerful Performance

LANZONE Router series is driven by the 64-bit dual-core processor, the private gigabit ASIC switching chip and FPGA components, enabling the whole hardware platform of the router to run on the hi-speed Ethernet frame. This innovative design attributes LANZONE with an inherent extra powerful processing ability, to enhance the upper-layer software functions.

### High expandability

Because built on the basis of switching core, LANZONE routers can expand their external interfaces, slots and modules without any limitation from the total CPU resources. The switching chip guarantees that the whole LANZONE router is provided with sufficient and broadband internal channels, making the expandability of LANZONE routers exceed that of traditional modularized routers.

### Excellent power-saving ability

LANZONE routers adopt the new-generation hardware chip which can guarantee the powerful processing ability and meanwhile save power. The power consumption of a whole LANZONE router is reduced by 15% to 20% compared with the mainstream devices in this industry. The long- term users can save the maintenance cost, which carries out the nationally advocated low-carbon idea. Additionally, LANZONE series also supports redundant power sources.

### Various protocols Support

This series supports the link-layer protocols such as FR, X.25, PPP, ISDN and HDLC, and dynamic routing protocols including RIP, OSPF, BGP and ISIS, the static route and policy based routing, so this series can interconnect with any

industry standard products. Further more, this series supports the integration of multiple services like routing, switching, voice, security and wireless, so they can meet the requirements of complicated network establishment.

### New services

The MPLS characteristics, and the MPLS-based layer- 3 VPN technology are supported so that the transparent Ethernet transmission service and the flexible enterprise interconnection are achieved. IPv6 data forwarding, routing protocols and multicast routing protocols are all supported; also the IPv4/IPv6 protocol stack and the interconnection technology are supported, so the existing networks can be smoothly upgraded to the IPv6 networks.

### High security

This series supports flexible ACL, firewall filtration technology, NAT, multiple VPN technologies such as IPSec/L2TP/PPTP/GRE, and multiple security methods such as AAA, Radius, TACACS+, PAP and CHAP.

### Traffic management policy

Various QoS mechanism are supported such as FIFO, PQ, CQ, CBWFQ, LLQ, WFQ, RED, WRED, DSCP, IP Precedence, RTS, RSVP and CAR, so key services can be guaranteed with a reliable bandwidth and users' bandwidth will be utilized more efficiently.

### Flexible management and maintenance

This series provides a lot of inband and outband management tools such as Console and Telnet, SNMP, RMON, Syslog, etc. so the management and monitoring of network can be efficient

Model		LZ-T-R2824-02
Standard interfaces	Console	1
	AUX	1
	Gigabit Ethernet	2 Combo
	Gigabit Ethernet Routing Ports	4
Expanded slot	HIC	2
	Hardware encryption	Built in
Memory	Boot ROM	512K
	Flash	32M Default (upgradable up to 2GB using CF Card)
	SDRAM	512 MB by default, expandable to 1G
	Size	19-inch standard cabinet and 1U chassis
Temperature/Humidity	Working temperature and humidity	-10 <sup>o</sup> C ~ 55 <sup>o</sup> C; 10% ~ 85% no condensation
	Storage temperature and humidity	-20 <sup>o</sup> C ~ 65 <sup>o</sup> C; 5% ~ 95% no condensation
Power characteristics	voltage	100-240VAC or -36 ~ -72VDC power supply
	Power Consumption	≤30W

## Features and Functions Supported

Link interconnection	LAN protocols	ARP, agent ARP, free ARP
	WAN protocols	PPP, Multilink-PPP, PPPoE ( Client/Server )
		ISDN BRI/PRI, SLIP
		X.25, LAPB, X25-TCP, XOT, X.25 Switch, X.29
		Frame Relay, FR Switch
	HDLC, LLC2, SDLC, DLSW-SSP	
Network protocols	Routing Protocols	Static route, directly-connected route and default route
		RIPv1/v2 , OSPFv2 , BGPv4 , IS-IS
		PBR policy-based routing
		Fast Switch, Load-Balance
	Multicast routing	IGMP
		PIM-DM, PIM-SM, DVMRP
	IP function	ICMP, TCP, UDP , IP Option
		NAT, PAT, Port-MAP, Private-Service, ALG
		Ping, Trace Route, NS Lookup
		IP ACL, IMP filter, Fast-Access
		DHCP Client/Server/Relay
		DNS, DNS host , DNS Proxy, DDNS ( PeanutHull/DynDNS/CTC )
		Helper-Address , UDP Helper
		IP unnumbered , DDR
		Keep-alive, PDP ( compatible with CISCO )
		Net Flow, IP Accounting
		TFTP Client/Server, FTP Client
		SNTP , job/schedule
		PNP
	ALIAS	
Reverse telnet, VTY binding		
MPLS	AToM, VPLS, MP-BGP, VRF	
	L2VPN, L3VPN	
	MPLS TE**	
IPv6	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL (Passing Phase II authentication)	
	IPv6 transition: NAT-PT, IPv6 tunnel, 4over6	
	IPv6 tunnel: manual tunnel, automatic tunnel, GRE tunnel, 6to4, ISATAP	
	IPv6 route: IPv6 static route, RIPv6, OSPFv3, IS-ISv6, BGP4+	
Reliability	Backup function	Supporting interface backup
		Supporting the backup of the floating route of the line
		Supporting the E-backup and keep-alive of Ethernet
		Supporting VRRP and HSRP
		Supporting bandwidth-based load bearing and backup
		Supporting the flow-based load balance and backup

QoS	Congestion control	FIFO, PQ, CQ, WFQ, CBWFQ
	Congestion avoidance	WRED/RED
	Flow shaping	Support GTS (Generic Traffic Shaping)
	Reservation	RSVP
	Others	GBSC , Layer7 filter
	Flow classification	Support the classification of ACL flows
		Support the classification of the IP Precedence flows
		Support the classification of DSCP flows
		Support the classification of MAC addresses
Support the 802.1P classification		
Switching	switching	802.1p CoS, 802.1Q VLAN, 802.1x authentication
		STP, RSTP, PVST
		Keep-alive, port mirror, broadcast/multicast storm limitation
Network security	AAA	Authentication, Authorization, Accounting
		Support Local, Radius, Tacacs+
		PAP, CHAP, MS-CHAP
	Firewall	ACL, NAT
		Detecting the ASPF state
		Supporting the prevention of SYN flood, UDP flood or ICMP flood
		Supporting ARP attack prevention, ARP-Scan and DHCP snooping
	Supporting the prevention of attacks from all kinds of network packets such as Ping of Death, Tear-drop, Land-Based, WinNuke, PingSweep, ARP attack and IP-Spoofing	
	VPN	IKE, IPsec, DMVPN, EZVPN
L2TP, PPTP, GRE, SSL		
Supporting VPN cascading		
VoIP	Interface	FXS/FXO/E&M
	Protocol stack	H.323 MGCP SIP
	Codec	G.711A law, G.711U law, G.723R53, G.723R63, G.729a, G.729R8
3G wireless	Supported mode	WCDMA, CDMA2000, TD-SCDMA
Management and maintenance	Network management	SNMP/MIB/SYSLOG/RMON/HTTP management
	Local management	CLI management and file system management
	Logon mode	Support console/Telnet/VTY/SSH logon mode

## Ordering Information

**LZ-T-R2824-02** : Modularized multi-service router with 1 console port, 2 GE combo ports, 4 GE-LAN ports, 1 built-in encryption engine, and 2 HIC slots.

**LZ-HIC-1TB** : WAN interface Single-Port serial card (V28/V35)