



# ACON R1608

## Next-Generation Multiservice Router Series

ACON R1608-GV

**ACON R1608** is the next-generation multiservice switching router platform developed by Advanced-Connectek Inc. (ACON). The router platform is of high performance by integrating a 64-bit multi-core processor, a gigabit switching chip and FPGA into one solution. ACON R1608 provides diversified options for the user.

ACON R1608 builds a real multiservice broadband platform by providing rich software functions such as routing, switching, safety and VPN.

With its strong processing and expansion capability, rich software functions and hardware modules, ACON R1608 meets requirements of the government, financial institutions, the defense system, operators and enterprises in network construction.

### ➔ Main Characteristics

#### High Performance

ACON R1608 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 with a super processing capability, providing a guarantee for upper-layer software functions.

#### Energy-saving Advantage

ACON R1608 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 router is reduced by 15% to 20%, which both reduces the device maintenance cost.

#### Varied protocols

ACON R1608 supports dot1q; static route; policy route; and dynamic route such as RIP, OSPF, BGP.



These routing protocols are well compatible with the devices manufactured by the mainstream vendors in the industry. Besides, ACON R1608 supports integration of multiple services such as routing, switching and safety which meets the requirement of complicated network construction.

## ➔ Main Characteristics

### New services

ACON R1608 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.

ACON R1608 supports IPv6 data forwarding, routing protocols and multicast routing protocols; ACON R1608 also supports the IPv4/ IPv6 protocol stack and the interconnection technology, which make the existing networks smoothly upgrade to IPv6.

### Secure service access

ACON R1608 supports selective ACL firewall filtration technology, NAT, VPNs such as IPSec/L2TP/ PPTP/GRE, and security technologies such as AAA, Radius, PAP/CHAP.

### Traffic management policy

ACON R1608 supports varied queues including FIFO, PQ, CQ, CBWFQ, LLQ, WFQ, DSCP, IP Precedence and CAR. ACON R1608 supports its self-developed traffic control and service management policy (GBSC),



which can better real-time management arrange and monitor your data traffic.

### Flexible management and maintenance

ACON R1608 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.

## ➔ Technical Parameters

Model		R1608-GV
Chassis	Console	1
	USB2.0	1
	GE-WAN	1
	GE-LAN	2x4
	RESET	1
Built-in Encryption	Encryption engine	support
Performance/Capacity	PPS	1Mpps
	BootROM	512K
	Flash	32MB
	SDRAM	SDRAM 512MB
Peripherals	Voltage	AC Adaptor
	Power	≤20W
	Dimensions mm (W×D×H)	240x180x44
	Weight	1.1Kg
Temperature/Humidity	Operating	0°C-40°C; 10%-85% non-condensation
	Storage	-20°C-65°C; 5%-95% non-condensation
Link interconnection	LAN	ARP, ARP proxy, Gratuitous ARP
	WAN	PPPoE (Client/Serv)
VPN	Unicast	static route, direct route, default route RIPv1/v2, OSPFv2, BGPv4 PBR FastSwitch, Load-Balance
	Multicast	IGMP PIM-DM, PIM-SM



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VPN	IP	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 (PeanutHull/DynDNS/CTC)
		Helper-Address, UDP Helper
		IP unnumber, DDR
		Keep alive, PDP (compatible with CISCO)
		NetFlow, IP Accounting
		TFTP Client/Serv, FTP Client
		SNTP, job/schedule
		ALIAS
		AToM, VPLS, MP-BGP, VRF
		L2VPN, L3VPN
Reliability	MPLS	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL
		IPv6 QoS
		IPv6 transition: NAT-PT, IPv6 tunnel, 4over6
		IPv6 tunnel: IPSec v6, GRE, 6to4, ISATAP
		IPv6 route: IPv6 static route, RIPng, OSPFv3, BGP4+
		Interface backup
		Floating route backup
		E-Backup, Keep alive Ethernet remote monitoring
		VRRP
		bandwidth based load sharing and backup
QoS	IPv6	traffic based load balancing and backup
		BFD for RIP, OSPF, BGP, MPLS and VRRP
	Congestion management	FIFO, PQ, CQ, WFQ, CBWFQ
		WRED/RED
		GTS (Generic Traffic Shaping)
		GBSC, Layer7filter
	Congestion avoidance	ACL
		IP Precedence
		DSCP
		MAC
	Traffic shaping	
	Others	
	Traffic classification	



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Model		R1608-GV
Switching function	Switching	802.1p CoS, 802.1Q VLAN, 802.1x Keep alive, port mirror, broadcast/multicast storm control
	AAA	Authentication, Authorization, Accounting enable, local, Radius, Tacacs+ PAP, CHAP, MS-CHAP
Network safety	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, Win Nuke, Ping Sweep, ARP attack and IP-Spoofing
		IKE, IPSec, DMVPN, EZVPN
	VPN	L2TP, PPTP, GRE
		VPN nesting
	Network management	SNMP, MIB, SYSLOG, RMON, HTTP management
Management and maintenance	Local management	CLI management and file system management
	Log-on	Console/Telnet/VTY/SSH log-on mode

### Order Information

Chassis	
ACON R1608-GV	R1608-GV multiservice router (1 CON, 1 USB2.0, 1 GE-WAN, 8 GE-LAN, encryption engine, Adaptor power supply)

### Typical Application

