BDCOM BSR2800-08/ BSR2800-10 Series
3G/4G Multiservice Routers

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Product Overview

BDCOM BSR2800 Series is the next-generation multiservice switching router platform developed by BDCOM. The router platform is of high performance by integrating a 64-bit multi-core processor, a high-speed switching chip and FPGA into one solution.

BSR2800-08T   BSR2800-08LTE

BDCOM BSR2800 includes models such as BSR2800-08C, BSR2800-08U, BSR2800-08T and BSR2800-08LTE. Each BSR model has 1 gigabit WAN port, 8 gigabit LAN ports, 1 built-in 3G/4G module, 1 USB2.0 port. BSR2800 provides diversified options for the user.

BDCOM BSR2800 series is equipped with BDROS operating system, of which BDCOM has the independent intellectual property right. BDCOM BSR2800 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, BDCOM BSR series meet requirements of the government, financial institutions, the defense system, operators and enterprises in network construction.

Product Characteristics

➢ **High Performance**

BDCOM BSR2800 series 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 BSR with a super processing capability, providing a guarantee for upper-layer software functions.

➢ **Strong Expansibility**

Because built on the basis of switching core, BSR routers can expand their external interfaces, slots and modules without any limitation from the total CPU resources. The switching chip guarantees that the whole BSR router is provided with sufficient and

broadband internal channels, making the expansibility of BSR routers exceed that of traditional modularized routers.

➢ **Energy-Saving Advantage**

BSR2800 series adopt 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 BSR router is reduced by 15% to 20%, which both reduces the device maintenance cost and accords with the low-carbon idea. BDCOM BSR2800 series is also equipped with the environment friendly maglev mute fan.

➢ **Varied Protocols**

BSR2800 series supports Layer 2 link protocols including HDLC, PPP and dot1q; static routers; policy routers; and dynamic routers such as RIP, OSPF and BGP. These routing protocols are well compatible with the devices manufactured by the mainstream vendors in the industry. Besides, BSR2800 series supports integration of multiple services such as routing, switching, voice, safety and wireless, which meets the requirement of complicated network construction.

➢ **New Services**

BSR2800 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. BSR2800 supports IPv6 data forwarding, routing protocols and multicast routing protocols; BSR2800 also supports the IPv4/IPv6 protocol stack and the interconnection technology, which makes the existing networks smoothly upgrade to IPv6.

➢ **Secure Service Access**

BSR2800 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**

BSR2800 supports varied queues including FIFO, PQ, CQ, CBWFQ, LLQ, WFQ, DSCP, IP Precedence, RTS, RSVP and CAR.

BDCOM BSR2800 series support its self-developed traffic control and service management policy (GBSC), which can better real-time arrange and monitor your data traffic.

> **Flexible Management and Maintenance**

BSR2800 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; BSR2800 series also support Chinese -English interface.

Technical Parameters

Model		08C	08T	08U	08LTE	10C	10LTE
Interface	CON	1					
	USB	1	1	1	/	1	1
	WAN	1*GE （supporting multi-WAN）				2*GE Combo	
	LAN	8*GE				8*GE	
	3G/4G	/	Telecom 3G	Unicom 3G	Universal 4G	/	Universal 4G
	Encryption engine	Built-in					
Performance/Storage	PPS	1Mpps				2Mpps	
	Flash	32MB				32MB	
	DRAM	512MB				512MB	
	Power supply	AC Adaptor				220VAC	
	Power	≤20W				≤20W	
	Dimensions mm (W×D×H)	240x180x44				300x200x44	
	Operating temperature	0℃-50℃					
	Operating humidity	5%-95% (non-condensing)					

Software Characteristics

| Model	08 Series	10 Series
Link interconnection	LAN	ARP, ARP proxy, Gratuitous ARP
	WAN	PPP, Multilink-PPP, PPPoE (Client/Serv)
	Routing	Static routing, straight-through routing, default routing RIPv1/v2，OSPFv2，BGPv4 PBR Fast Switch, Load-Balance
	Multicast	IGMP PIM-DM, PIM-SM
	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 Hull/DynDNS/CTC) Helper-Address, UDP Helper DDR Keep alive, PDP (compatible with CISCO) NetFlow, IP Accounting TFTP Client/Serv, FTP Client SNTP, job/schedule PNP ALIAS Reverse telnet, VTY binding

	MPLS	AToM, VPLS, MP-BGP, VRF L2VPN, L3VPN
	IPv6	IPv6 ND, IPv6 PMTU, IPv6 FIB, IPv6 ACL, IPv6 (authenticate through IPv6 PhaseII) IPv6 QoS IPv6 transition: NAT-PT, IPv6 tunnel, 4over6 IPv6 tunnel: IPSec v6, GRE, 6to4, ISATAP IPv6 route: IPv6 static route, RIPng, OSPFv3, BGP4+
Reliability	Backup function	Interface backup Floating 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
Switching function	Switching	802.1p CoS, 802.1Q VLAN, 802.1x STP, RSTP, PVST Keep alive, port mirror, broadcast/multicast storm control
Network safety	AAA	Authentication, Authorization, Accounting enable, local, Radius, Tacacs+ PAP, CHAP, MS-CHAP
	Firewall	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
	VPN	IKE, IPSec, DMVPN, EZVPN L2TP, PPTP, GRE VPN nesting
Mobile network	Type	WCDMA, CDMA2000, TD-SCDMA, TD-LTE, FDD-LTE
Management and maintenance	Network management	SNMP, MIB, SYSLOG, RMON, HTTP management
	Local management	CLI management and file system management

	Log-on	Console/Telnet/VTY/SSH

Networking and Applications

1. 3G-VPN Networking
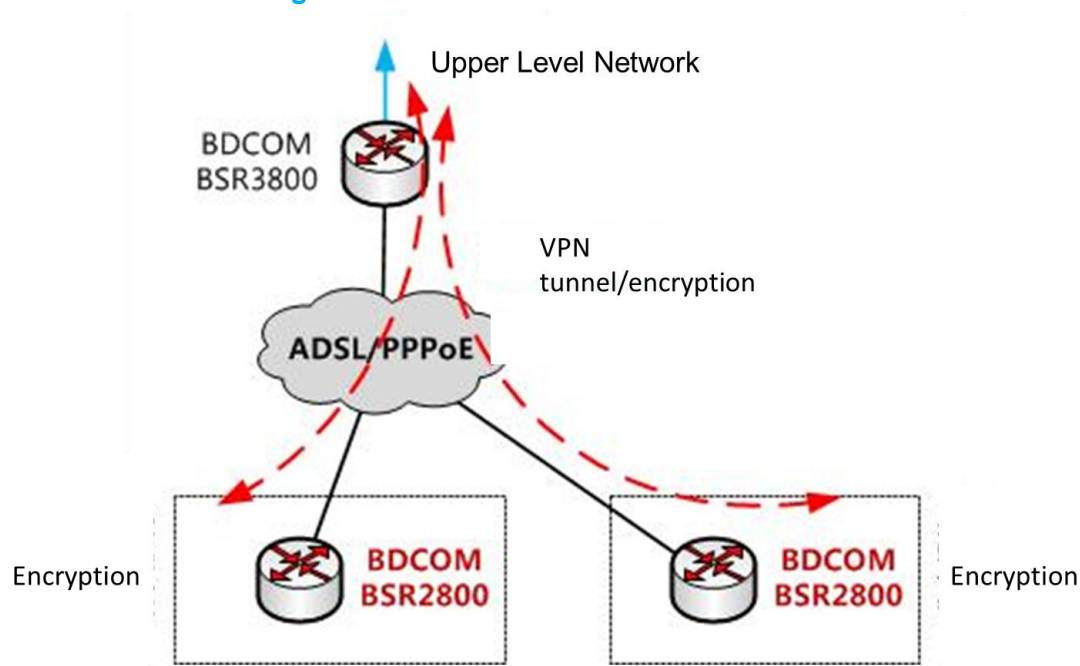
With the internet access has become more and more indispensable in off-bank ATMs, outdoors and cars, the advantage of 3G and 4G is emerging.

BDCOM BSR2800 Series adopts 3G or 4G link aggregation technique combining with VPN encryption technique, providing a convenient and safe network for the user.

Ordering Information

Model	Description
BDCOM BSR2800-08C	BSR2800-08 multi-service router (1 CON, 1 USB2.0, 1 GE-WAN, 8 GE-LAN; built-in encryption engine, Adaptor power supply)
BDCOM BSR2800-08U	BSR2800-08 multi-service router (1 CON, 1 USB2.0, 1 GE-WAN, 8 GE-LAN; built-in Unicom 3G module and encryption engine, Adaptor power supply)
BDCOM BSR2800-08T	BSR2800-08T multi-service router (1 CON, 1 USB2.0, 1

	GE-WAN, 8 GE-LAN; built-in Telecom 3G module and encryption engine, Adaptor power supply)
BDCOM BSR2800-08LTE	BSR2800-08LTE multi-service router (1 CON, 1 USB2.0, 1 GE-WAN, 8 GE-LAN; built-in universal 4G-LTE module and encryption engine, Adaptor power supply)
BDCOM BSR2800-10C	BSR2800-10C multi-service router (1 CON, 1 USB2.0, 2 GE-Combo, 8 GE-LAN; built-in encryption engine, 220V power supply)
BDCOM BSR2800-10LTE	BSR2800-10LTE multi-service router (1 CON, 1 USB2.0, 2 GE-Combo, 8 GE-LAN; built-in universal 4G-LTE module and encryption engine, 220V power supply)

For More Information

For more information about BDCOM BSR2800 Series, please contact your local BDCOM account representative.

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