BDCOM

BSR2800-08/10 Series 4G Router

Product Overview

BDCOM BSR2800-08/10 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.

BDCOM BSR2800-08/10 Series includes models such as BSR2800-08C, BSR2800-08LTE, BSR2800-10C and BSR2800-10LTE. BSR2800 Series provides diversified options for the user.

BDCOM BSR2800-08/10 Series is equipped with BDROS operating system, of which BDCOM has the independent intellectual property right. BDCOM BSR2800-08/10 Series 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 BSR2800-08/10 Series meet requirements of the government, financial institutions, the defense system, operators and enterprises in network construction.

Diversified options

- 1 or 2 GE WAN port
- 8 GE LAN ports
- 1 built-in 4G LTE
- 1 USB2.0 portdule

Multiservice platform

- RIP/OSPF/BGP
- PPTP/L2TP/GRE/IPSec
- GBSC flow-control

BDROS operating system

- IPv4/v6 dual-stack
- High performance
- energy efficiency design

BDCOM BSR2800-08/10 Series

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Product Characteristics

High Performance

BDCOM BSR2800-08/10 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 BSR2800-08/10 with a super processing capability, providing a guarantee for upper-layer software functions.

Strong Expansibility

The switching chip guarantees that the whole BSR2800-08/10 router is provided with sufficient and broadband internal channels, making the expansibility of BSR2800-08/10 routers exceed that of traditional modularized routers.

Energy-Saving Advantage

BSR2800-08/10 Series 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 BSR router is reduced by 15% to 20%, which both reduces the device maintenance cost and accords with the low-carbon idea.

BDCOM BSR2800-08/10 Series is also equipped with the environment friendly maglev mute fan.

Varied Protocols

BSR2800-08/10 Series 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, BSR2800-08/10 Series supports integration of multiple services such as routing, switching, voice, safety and wireless, which meets the requirement of complicated network construction.

New Services

BSR2800-08/10 Series 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.

BSR2800-08/10 Series supports IPv6 data forwarding, routing protocols and multicast routing protocols;

BSR2800-08/10 Series also supports the IPv4/IPv6 protocol stack and the interconnection technology, which makes the existing networks smoothly upgrade to IPv6.

Secure Service Access

BSR2800-08/10 Series 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

BSR2800-08/10 Series supports varied queues including FIFO, PQ, CQ, CBWFQ, LLQ, WFQ, DSCP, IP Precedence, RTS and CAR.

BDCOM BSR2800-08/10 Series supports its self-developed traffic control and service management policy (GBSC), which can better real-time arrange and monitor your data traffic.
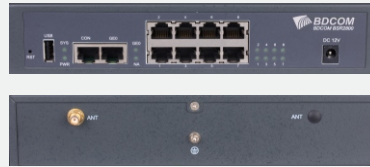
Flexible Management and Maintenance

BSR2800-08/10 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;

Model lists
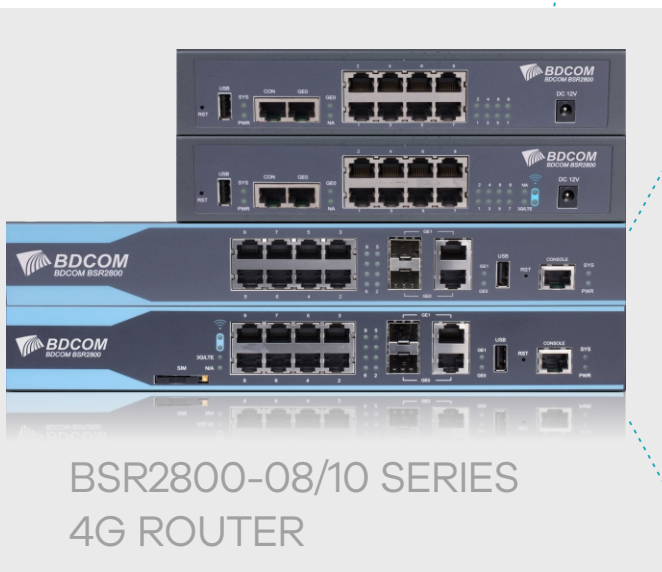
BSR2800-08C

- 1 CON, 1 USB2.0, 1 GE-WAN, 8 GE-LAN;
- Adaptor power supply

BSR2800-08LTE

- 1 CON, 1 USB2.0, 1 GE-WAN, 8 GE-LAN;
- Built-in universal 4G-LTE
- External LTE antenna
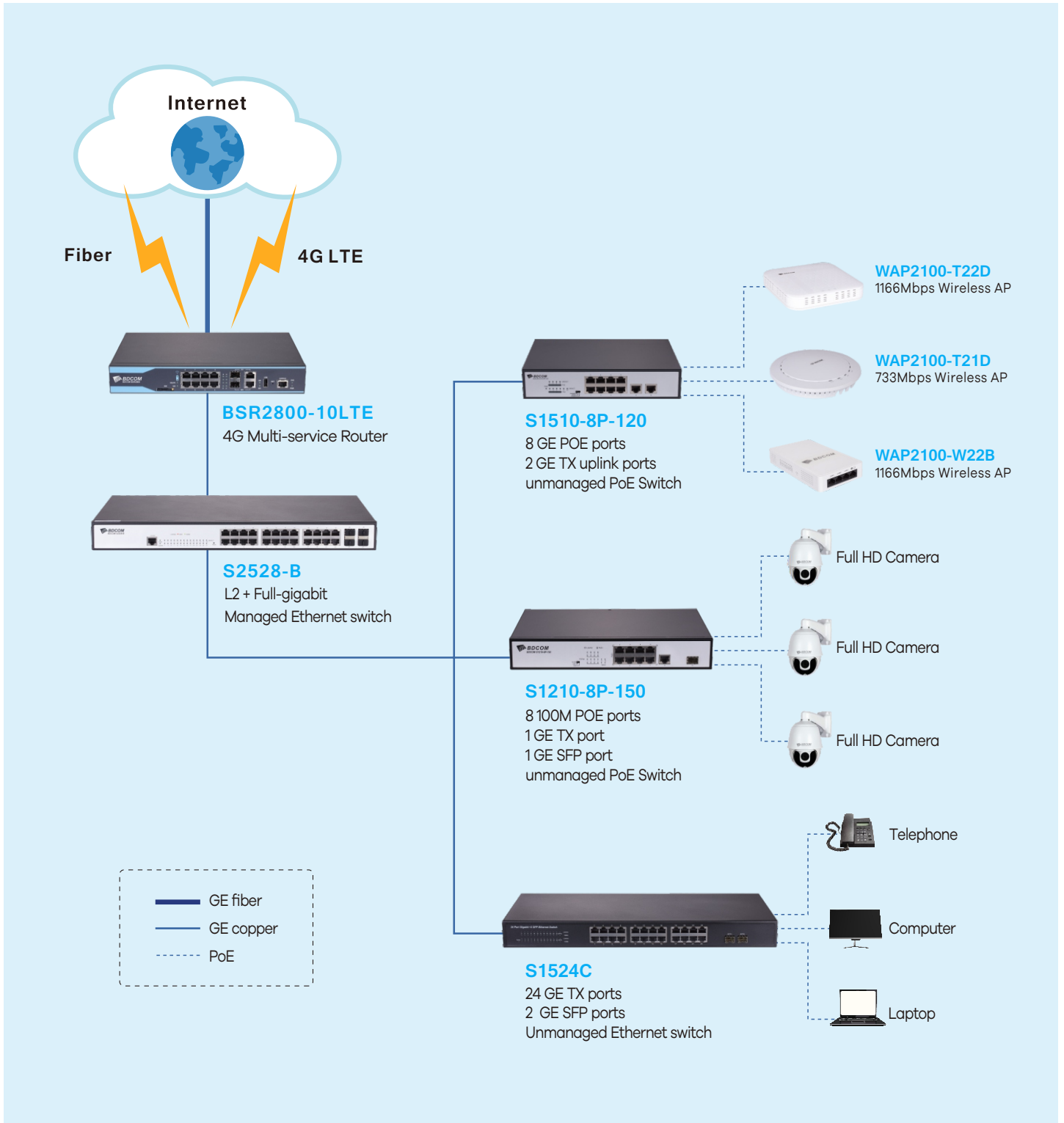- Adaptor power supply

BSR2800-10C

- 1 CON, 1 USB2.0, 2 GE-Combo WAN, 8 GE-LAN;
- 220V power supply

BSR2800-10LTE

- 1 CON, 1 USB2.0, 2 GE-Combo WAN, 8 GE-LAN;
- Built-in universal 4G-LTE
- External LTE antenna
- 220V power supply

BSR2800-08/10 SERIES
4G ROUTER

Application Diagram

Internet

Fiber

4G LTE

BSR2800-10LTE
4G Multi-service Router

S2528-B
L2 + Full-gigabit
Managed Ethernet switch

S1510-8P-120
8 GE POE ports
2 GE TX uplink ports
unmanaged PoE Switch

WAP2100-T22D
1166Mbps Wireless AP

WAP2100-T21D
733Mbps Wireless AP

WAP2100-W22B
1166Mbps Wireless AP

S1210-8P-150
8 100M POE ports
1 GE TX port
1 GE SFP port
unmanaged PoE Switch

Full HD Camera

Full HD Camera

Full HD Camera

─── GE fiber
─── GE copper
----- PoE

S1524C
24 GE TX ports
2 GE SFP ports
Unmanaged Ethernet switch

Telephone

Computer

Laptop

Software Characteristics

Routing

LAN
- ARP, ARP proxy, Gratuitous ARP

WAN
- PPP, PPPoE (Client/Server)

Routing
- Static route, default route
- RIPv1/v2, OSPFv2, BGPv4
- Fast Switch, Load-Balance
- PBR

Multicast
- IGMP
- PIM-DM, PIM-SM

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+

Switching

Switching
- 802.1p CoS, 802.1Q VLAN
- STP, RSTP
- Keep alive, port mirror, broadcast/ multicast storm control

Network safety

AAA
- Authentication, Authorization, Accounting
- Enable, local, Radius, Tacacs+
- PAP, CHAP, MS-CHAP

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 Hull/DynDNS/CTC)
- Helper-Address, UDP Helper
- IP unnumber, DDR
- Keep alive, PDP (compatible with CISCO)
- NetFlow, IP SLA
- TFTP Client/Serv, FTP Client
- SNTP, job/schedule
- PNP
- ALIAS
- Reverse telnet, VTY binding

Network Security

Firewall
- ASPF state detection
- SYN flood, UDP flood or ICMP flood ptotection
- ARP attack protection, ARP-SCAN and DHCP-Snooping
- Prevention of Ping of Death, Teardrop, Land-Based, Win Nuke, Ping Sweep, ARP attack and IP-Spoofing

VPN
- IKE, IPSec, DMVPN, EZVPN
- L2TP, PPTP, GRE,EoGRE
- VPN stacking

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 Flow Classification
- IP Precedence Flow Classification
- DSCP flow classification
- MAC address classification
- 802.1P classification

4G
- TD-LTE, FDD-LTE

Management
- SNMP, MIB, SYSLOG, RMON
- Console/Telnet/VTY/SSH/HTTP

Technical Parameters

Items		BSR2800-08C	BSR2800-08LTE	BSR2800-10C	BSR2800-10LTE
Interface					
CON		1	1	1	1
USB		1	1	1	1
WAN		1 GE TX	1 GE TX	2 GE TX/SFP Combo	2 GE TX/SFP Combo
LAN		8 GE TX	8 GE TX	8 GE TX	8 GE TX
4G		/	Universal 4G	/	Universal 4G
SIM slot		/	1	/	1
Antenna		/	External, SMA connector	/	External, SMA connector
RST		1	1	1	1
Encryption engine		Built-in	Built-in	Built-in	Built-in
Performance					
Throughput		1Mpps	1Mpps	2Mpps	2Mpps
Flash		32MB	32MB	32MB	32MB
DRAM		512MB	512MB	512MB	512MB
NAT concurrent session		<100K	<100K	<200K	<200K
Appearance					
Consumption	**No-load**	≤10W	≤10W	≤11W	≤11W
	Full-load	≤15W	≤15W	≤16W	≤16W
Total output BTU (note: 1000 BTU/hr = 293W)		51.19	51.19	54.61	54.61
Chassis	**Dimensions mm (WxDxH)**	220x160x44	220x160x44	300x200x44	300x200x44
	Weight (kg,empty)	1	1	1.8	1.8
Package	**Dimensions mm (WxDxH)**	350×268×94	350×268×94	454×96×287	454×96×287
	Weight(kg)	1.5	1.5	2.5	2.5
Operating	**temperature**	0℃ ~ 50℃1	0℃ ~ 50℃1	0℃ ~ 50℃1	0℃ ~ 50℃1
	humidity	0%~85% (non-condensing)	0%~85% (non-condensing)	0%~85% (non-condensing)	0%~85% (non-condensing)
Storage	**temperature**	-40℃～+85℃	-40℃～+85℃	-40℃～+85℃	-40℃～+85℃
	humidity	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)
Fan		1	1	1	1
Noise@25°C (dBA)		21	21	22	22
Power supply		AC 220V Adaptor	AC 220V Adaptor	220V AC	220V AC
Accessory		Console cable, power adaptor	Console cable, power adaptor	Console cable, power cord	Console cable, power cord

Ordering Information

Model	Description
BDCOM BSR2800-08C	BSR2800-08C Series 4G Router (1 Console port, 1 USB2.0 port, 1 RST, 1 GE TX WAN port, 8 GE TX LAN ports; built-in encryption engine, AC Adaptor power supply)
BDCOM BSR2800-08LTE	BSR2800-08LTE 4G Router (1 Console port, 1 USB2.0 port, 1 RST, 1 GE TX WAN port, 8 GE TX LAN ports; built-in universal 4G-LTE and encryption engine, AC Adaptor power supply)
BDCOM BSR2800-10C	BSR2800-10C Series 4G Router (1 Console port, 1 USB2.0 port, 1 RST, 2 GE TX/SFP Combo WAN ports, 8 GE TX LAN ports; built-in encryption engine, 220V AC power supply)
BDCOM BSR2800-10LTE	BSR2800-10LTE Series 4G Router (1 Console port, 1 USB 2.0port, 1 RST, 2 GE TX/SFP Combo WAN ports, 8 GE TX LAN ports; built-in universal 4G-LTE and encryption engine, 220V AC power supply)

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