Konnex®

BIG2000 Series
Multi-Service Converged Gateway

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Product Overview

BIG2000 series is a KONNEX—developed multi-service converged gateway oriented for various ICT scenarios such as enterprises, parks, hotels, campuses, hospitals, and commercial chains.

BIG2000 series adopts a brand-new fifth-generation BDROS operating system and is built with an ARM-based multi-core high-performance embedded platform, which can provide users with practical NAT shared Internet, multi-line routing strategies, flexible QoS flow control, VPN interconnection, and wireless AC management. Therefore, BIG2000 series is the ideal choice for various enterprise users.

BIG2000-20C/08LTE   BIG2000-20   BIG2000-40

Product Characteristics

➢ **Powerful Performance**

BIG2000 series is built with an ARM-based high-performance embedded processor, providing maximum 10G high-speed throughput. The whole device has ultra-high processing performance and forwarding efficiency, so that can carry a large amount of data traffic or concurrent access.

➢ **Excellent Energy-saving Characteristics**

BIG2000 series adopts energy-saving chip with low power consumption. Compared with the other mainstream devices in the industry, power consumption of the BIG2000 series is reduced by 15% to 20%, which saves the total cost of ownership (TCO) and accords with the low-carbon idea.

➢ **Comprehensive Routing Protocols**

BIG2000 series supports multiple deployment modes such as routing, gateway and transparent bridge.

BIG2000 series supports static routing, dynamic routing (including RIP, OSPF, BGP) and policy-based routing (PBR). Its comprehensive routing protocols make it can be perfectly compatible with the devices of mainstream manufacturers in the industry.

BIG2000 series supports multi-service integration such as routing and switching integration, wired and wireless integration, authentication and marketing integration, to meet the needs of various complex network constructions and effectively reduces overall costs.

➤ **Rich Network Security Features**

BIG2000 series supports flexible ACL firewall filtration and NAT technology to protect the user network against potential threats from external networks.

BIG2000 series supports not only multiple VPN technologies such as IPSec, SSL, L2TP/PPTP, GRE, but also nested deployment, to provide cost-effective solutions for remote branches and branch backhaul applications. At the same time, multiple VPN technologies also greatly enhance the data security.

The built-in logic encryption module of BIG2000 series effectively improves the VPN processing capacity. While ensuring data security, it also greatly reduces the CPU resource occupation.

➤ **Thoughtful Cloud Management and Maintenance**

BIG2000 series supports management through COP with cloud registration access and remote management. Users can not only remotely view the network status and device running states, but also perform daily operation and maintenance and handle common problems through the PC web or mobile client, which significantly eliminates failure recovery time and travel costs and greatly improves production efficiency as a whole.

BIG2000 series is equipped with color LCD screen through which users can check the operation status without relying on other management devices and terminals, which greatly simplifies the process of inspection and troubleshooting.

Technical Parameters

Product model	BIG2000-08LTE	BIG2000-20C	BIG2000-20	BIG2000-40
Management port	1 Console	1 Console	1 Console	1 Console
Ethernet port	1 GE-Combo 8 GE-LAN 1 4G LTE	1 GE-Combo 8 GE-LAN	1 GE-Combo 8 GE-LAN	1 10GE SFP+ 2 GE SFP +2 GE TX 8 GE LAN

	(dual-SIM single-standby)			
Other characteristics	1 USB 1 Reset	1 USB 1 Reset	1 USB 1 LCD 1 MODE	1 USB 1 LCD 1 MODE
Recommended bandwidth	1Mpps	1Mpps	1Mpps	5Mpps
Power supply	220VAC	220VAC	220VAC	220VAC
Dimensions (WxDxH)	280x180x44mm	280x180x44mm	443x200x44mm	443x200x44mm
Operating temperature	-10°C~50°C	-10°C~50°C	-10°C~50°C	-10°C~50°C
Operating humidity	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)	5%~95% (non-condensing)

Software Specifications

ARP	ARP dynamic learning, ARP static binding, free ARP anti-spoofing
Ethernet protocol	802.3 protocol family, 802.1Q VLAN, Rate-limit, broadcast storm suppression
Link layer protocol	Point to Point Protocol (PPP)
LTE wireless	TDD and FDD-LTE full Netcom modules, backward compatible APN dial-up dual-SIM single-standby and wireless backup networking (applicable to some models)
WAN access	Static IP address, DHCP dynamic IP and PPPoE dial-up access Multi-line networking Load balancing of multiple policies (equivalent, weighted)
Routing protocol	Static routing, policy routing based on IP 5-tuple RIP V1/V2, OSPF V2, BGP dynamic routing protocols Floating routing and routing automatic backup Keepalive, BFD remote link detection

NAT	NAT based on IP, port and address pool
	SNAT, DNAT
	NAT port mapping
	NAT concurrent connection limit
	NAT Application Layer Gateway (ALG)
DHCP	DHCP server, DHCP Relay
	DHCP Option43, 60, 82
IP-based service	IP, ICMP, TCP, UDP
	DNS and DDNS
	SNTP
	FTP and TFTP
	PPPoE server
QoS	Traffic classification based on IP 5-tuple
	Committed Access Rate (CAR) and Generic Traffic Shaping (GTS)
	PQ, CQ, CBWFQ
Multicast protocol	IGMP, PIM-SM, PIM-DM
Network security	AAA, PPP, CHAP and MS-CHAP authentication
	IP and MAC-based ACL firewall policy
	Rich VPN protocols such as IKE, IPSEC, L2TP/PPTP, GRE
	Nested deployment of multiple VPN protocols
	Anti-Flood capability for ARP, IP, ICMP, TCP
	Attack protection such as Ping of Death, Tear-drop, WinNuke, Smurf, etc.
IPv6 protocol	IP v4/v6 dual stack
	IPv6 static routing
	IPv6 Dynamic routing such as RIPng, OSPFv3, BGP4+
	IPSEC v6
Management and maintenance	Console, Telnet, SSH, SNMP
	ping, traceroute
	Syslog
	LCD color screen to provide real-time operation, fault diagnosis and online help
	Cloud management through COP

Ordering Information

Model	Description
ERO-KO-BIG2000-08LTE	BIG2000-08LTE Converged Gateway (1 Console, 1 USB2.0, 1 GE Combo, 8 GE LAN, built-in full Netcom LTE, 220VAC power supply)
ERO-KO-BIG2000-20C	BIG2000-20C Multi-Service Converged Gateway (1 Console, 1 USB2.0, 1 GE Combo, 8 GE LAN, 220VAC power supply)
ERO-KO-BIG2000-20	BIG2000-20 Multi-Service Converged Gateway (1 Console, 1 USB2.0, 1 GE Combo, 8 GE LAN, LCD color screen, 220VAC power supply)
ERO-KO-BIG2000-40	BIG2000-40 Multi-Service Converged Gateway (1 Console, 1 USB2.0, 1 10GE SFP+, 2 GE SFP, 2 GE TX, 8 GE LAN, LCD color screen, 220VAC power supply)