



SBC Gateway

SBC3000

The Becke SBC3000 Session Border Controller provides rich security, access, and interconnectivity features for the SIP networks of small and medium-sized telecom operators. Services include connectivity, routing/policy management, signaling flow control, QoS, and media processing.

The device employs a multi-core processor, a non-blocking gigabit switching network, and an embedded Linux operating system, achieving high performance while maintaining excellent stability. Low power consumption, while supporting dual hot-swappable power supplies, dual-machine hot standby (HA) and WebRTC, with carrier-grade high reliability.

The SBC3000 single unit supports 2000 concurrent sessions and 1500 channels of voice media transcoding processing, and also supports topology hiding, NAT traversal, and more. It supports secure communication methods such as security protection, SRTP and TLS encryption, and also supports G.729, G.723, G.711a/u, and G.726. The device supports multiple media codecs such as AMR, OPUS, and iLBC, and has routing load balancing capabilities.

Highlights

- ☑ The SBC3000 single unit supports 2000 concurrent sessions and 1500 channels of voice media transcoding processing;
- ☑ Supports dual-machine hot standby for Trunk SBC and WebRTC SBC;
- ☑ Supports WebRTC, voice, and video calls;
- ☑ Standard SIP protocol and flexible routing rules, perfectly compatible with IMS system;
- ☑ Supports topology hiding and security anti-attack strategies to protect the core network;
- ☑ Supports intelligent bandwidth limiting and dynamic blacklists;
- ☑ Supports cross-network and NAT traversal, adapting to various networking environments;
- ☑ Supports SIP over TLS and SRTP encrypted sessions, ensuring security and reliability;

Detailed parameters

VoIP Protocols	SIP v2.0, UDP, TCP, TLS,RFC3261	Voice characteristics	Speech encoding: G.711a/ȳ, G.723 , G.729A/B, iLBC, G.726, AMR, OPUS
	SIP trunking operating modes: Peer/Access		Comfort noise generation (CNG)
	B2BUA user agent		Voice activity detection (VAD)
	SIP call flow control		Echo cancellation (G.168), maximum 128ms
	SIP registration flow control		RTP/RTCP
	SIP registration packet attack dynamic scanning detection		Voice interruption protection
	SIP abnormal call attack dynamic scanning detection		Adaptive dynamic buffering
	SIP header field transformation		Quality monitoring
	SIP header field pass-through		Fax: T.38 and Passthrough
	SIP packet redundancy mechanism		DTMF modes: RFC2833/Signal/Inband
	QoS service		DOS/DDOS attack defense
	NAT traversal		Access control policies
Management and maintenances	Web-based visual configuration and maintenance	Safety	Policy-based IP and SIP attack prevention
	Data backup/restore		Malformedmessagedetectionandprocessing
	Web firmware upgrade		UDP-Flood /TCP-Flood Attack Defense
	Built-in network packet capture function		SRTP encrypted session
	System Log		TLS security protection
	Operation Log		Caller ID and callee number
	Call detail records		ACL control
	NTP automatic time synchronization		VoIP firewall
	Multilingual switching		Call concurrency: Supports up to 2000 concurrent calls.
	NMS Centralized Management Platform		Concurrent transcoding: Supports 1500 voice transcoding callsconversion
	SNMP		Calling CPS: Maximum processing capacity of 150 concurrent requests per
	Remote Web and SSH		User registration limit: Maximum of 10,000 user registrations
Physical Specifications	Ethernet interface: 4 x 10/100/1000M Base-T Ethernet interfaces	performance	CPS Registration: Maximum processing capacity of 200 registration messages per second
	1*MCU: Single master controller		SIP trunks: Up to 1024 SIP trunks can be added
	4* MFU: Service Board		Access/Trunk SBC Dual-Machine Hot Standby (1+1)
	1 USB 2.0 port (reserved)		WebRTC SBC Dual-Machine Hot Standby (1+1)
physical properties	Serial port:1* RS232, 115200bps	Call processing	WebRTC Concurrency (Voice): 1500
	Dual power supply with hot standby: 100-240VAC, 50-60 Hz		Flexible routing rules
	Power consumption: 70W		Redundant route backup/selection
	Operating temperature: 0ȳ ~ 45ȳ		Control call routing by time period
	Storage temperature: -20ȳ ~ 80ȳ		Routing by calling/called number prefix
	Humidity : 10%-90%non-condensing		Match routes by SIP URL domain
	Dimensions (W/D/H):437*320*44mm (1U)		Match routes according to SIP request method
	Weight: 6kg		Change of calling and called numbers
	IP trunk redundancy and load balancing		
	Regular expressions for numbers		