

## SBC Series designed to provide SMBs, enterprises and service providers with unbeatable VoIP protection



### Why You Need an SBC

Businesses connecting their infrastructure to a SIP Trunk, or VoIP connection will primarily use an SBC to protect their VoIP network, as well as for interoperability, transcoding, and failover of their voice network.

### How Does It Work

An SBC is a device that sits between your internet connection and corporate network and analyses all the VoIP traffic that passes through. It is designed with security features to detect malicious VoIP traffic and automatically take action to save your network.



### When Would You Use an SBC

- **SIP Trunking** - An SBC will prevent hackers from finding your IP address and attempt to initiate malicious activity
- **Hosted Phone Service** - The service provider will have an SBC to protect their network, but your network also needs an SBC to protect your network
- **Remote Workers** - Lock down your network and securely connect remote workers to your corporate network

### Enhance Your Security to Protect Your VoIP Network

Often times, businesses will forget the importance of an SBC when switching from their legacy phone system to VoIP and simply use their existing firewall for protection, and make a huge mistake! Many ports in the firewall need to be opened for VoIP to function which gives hackers a wide open door into your network and compromise your business. The other pitfall of using your existing firewall, instead of an SBC, is that phone calls may not connect or there will be audio issues.

### Choose the Capacity that Meets Your Needs

- **SMB SBC** -Up to 30 simultaneous calls
- **Enterprise SBC** -Up to 250 simultaneous calls
- **Sangoma Carrier SBC** -Up to 4000 simultaneous calls

- ✓ **Protects SMBs, enterprises and service providers from VoIP threats**
- ✓ **Securely connects remote users to the corporate phone system without requiring a VPN connection**
- ✓ **Session-based licensing - All features included**
- ✓ **Supports 5 - 4,000 Simultaneous Calls Available in Virtual Machine**
- ✓ **Field Upgradeable Session Expansion**
- ✓ **Browser-based GUI for Easy Configuration**
- ✓ **Hardware-based Transcoding & Media Handling**
- ✓ **Provides Business Continuity, Quality of Service, Interoperability and more**
- ✓ **Annual Support & Maintenance Plans available**

# Technical Specifications

## Capacities

- Max call / sessions
- 4000 - Sangoma Carrier SBC
- 1000 - Virtual Machine (VM) SBC
- 250 - Enterprise SBC
- 30 - SMB SBC
- Unlimited SIP trunks
- Max. 120 TDM-SIP calls/sessions  
*\*Applicable only to Enterprise SBC*
- Full security (SRTP / TLS)
- Full transcoding capability (excludes SMB SBC)

## Media Capabilities

- Voice, Video, FAX, IM and Presence support
- Full RTP transcoding (G.711, G.722, G.729, G.726, G.723.1, iLBC, AMR, G.722.1)  
*\*Only with hardware transcoding option*
- T.38 Fax Relay

## Networking

- 10/100/1000 BaseT Ethernet ports
- 6x - Sangoma Carrier SBC
- 3x - Enterprise SBC
- 4x - SMB SBC
- IPV4, IPV6
- VLAN support

## Licensing

- Field upgradeable in 5/10 call increments (SMB)
- Field upgradeable in 25/50/100/250 call increments

## Security

- DDoS / DoS attack protection
- Media security with SRTP
- IPSec encryption
- IP firewall with port forwarding
- Call security with TLS / SRTP
- Two-stage authentication

## VoIP

- SIP 2.0 compliant
- SIP intrusion prevention
- SIP trunking and remote working
- SIP registration pass-thru
- SIP malformed packet protection
- Topology hiding
- ENUM routing
- SIP request rate limiting
- SIP registration scan attack detection
- SIP friendly load limitation
- SIP header normalization
- Advanced NAT traversal capabilities

## Debugging

- Dedicated Browser interface for capturing full RTP media and signaling information
- Onboard browser-based PCAP tracing, signaling and media – wireshark compatible
- Large onboard storage capacity for long term tracing

## Session and Monitoring

- Multiple session routing options
- RTCP statistics reports
- QoS (ToS or DSCP)
- RADIUS CDR and authentication
- QoS monitoring and reporting

## High Availability / Redundancy

- 1:1 active / standby two-box redundancy to guarantee business continuity

## Call Control

- Least cost routing
- Multiple call access control options
- Rate limiting: Call and registration
- Endpoint authentication
- Dynamic load balancing and call routing
- Advanced XML routing engine
- Intelligent media anchoring / release
- Media bandwidth policy

## Management

- Easy to use web interface
- Real-time monitoring and debugging
- HTTP XML-based CDR
- TR-069 for remote provisioning
- REST based interface to remotely configure SBCs

## Telephony Interface (Enterprise SBC)

- Up to 4 E1/T1s (with A101DE/A102DE/A104DE card)
- Echo cancellation up to 128ms tail
- Primary rate ISDN, configurable NT/TE
- T1: Q.931, NI2, 4ESS, 5ESS, DMS-100
- E1: Q.931, ETSI

## Hardware Specifications & Minimum Requirements

### SMB SBC

- Power: External universal AC/DC power brick
- Dimensions: 127mm (W) x 127mm (D) x 50mm (H)
- Weight: .68kgs (1.5lbs)

### Enterprise SBC

- Power: 60W universal internal power supply
- Dimensions: 430mm (W) x 305mm (D) x 45mm (H)
- Weight: 7.25kgs (16lbs)
- Mounting clips included

### Sangoma Carrier SBC

- Power: Dual internal 100~240V power supply
- Dimensions: 430mm (W) x 520mm (D) x 44.5mm (H)
- Weight: 6.35kgs (14lbs)
- 19 inch rackmount brackets included

### VM SBC:

- Hypervisor: VMware, ESX, Linux KVM, Microsoft Hyper-V, Oracle Virtualbox
- Virtual Network Interfaces: minimum 1 (2 preferred)
- Virtual Cores: 1-4
- Memory: 2GB
- Disk Space: 20GB