

New Rock Technologies, Inc.

SX3000 Enterprise Session Border Controller (SBC)

Product Description

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1.1 Overview

The SX3000, a Session Border Controller (SBC), is a member of VoIP product family developed by New Rock Technologies, Inc. It interconnects voice communications over different IP networks and provides security schemes to protect the network from attacks and the privacy of communications.

As an important component of VoIP deployment, an SBC usually resides between an access network and a backbone network to provide service to residential and/or enterprise customers. The SX3000 is specifically designed to reside on the edge of enterprise/VPN network and perform such functions as access control, firewall and NAT traversal, protocol interworking, data encryption and QoS management.

1.2 Functions and Features

- Firewall traversal
- Local/remote user NAT traversal
- RTP proxy
- Encryption and decryption of signaling and voice media streams, including TLS/SRTP
- Surveillance of voice media stream
- Supports QoS
- Supports SIP, RTP/RTCP, HTML/HTTP protocols
- Supports MSRP protocol
- Telnet/SSH management
- Static routing
- Uses a whitelist to enhance access control
- Prevents blocking of IP address, protocol, and softswitch signaling port
- Detection of network faults and releasing of RTP resources
- Gateway registration and authentication
- Status and statistics report with TR069
- Enhanced security policies, including signaling encryption, NAT, prevention of malicious attacks, interception of illegal IP packets, and filtering out invalid packets
- Stores log entries on an SD card

1.3 Technical Specifications

Table 1-1 Technical Specifications

Name	Description
Functions	
Signaling and/or voice encryption	Supports TLS/SRTP and other encryption scheme on signaling and/or voice media streams
Voice processing	RTP packet forward, firewall traversal, local/remote user NAT traversal

Name	Description
Multiple SIP servers	Connections to multiple (up to 5) SIP servers
Security	Access control through IP table, conceal of NAT address, encryption and decryption, blocking calls from untrusted devices, discarding unknown messages, and security log file
Registration and authentication	Support registration and authentication of SIP terminals
Protocols	SIP, RTP/RTCP, TLS, SRTP, HTTPS, TCP/UDP, NTP/SNTP, SFTP, ARP, ICMP, and MSRP
QoS	Based on IP TOS values, place a packet in a prioritized outgoing queue or take a route with appropriate latency, throughput, or reliability.
Surveillance of network	Network failover
Statistics	Access history, online terminal list, and call traces
Capability	
Concurrency	250 concurrent calls with TLS encryption and decryption. 500 concurrent calls without encryption or decryption
User registration	3000 SIP terminals with un-encrypted or encrypted registration (within 5 minutes)
Delay	< 30 microseconds
Management	
Interface	Web-based GUI
Maintenance	RS-232 console, Telnet/SSH, remote configuration and maintenance based on TR069
Hardware	
Ethernet connector	4 x 10/100/1000 Base-T RJ45 ports, auto sensing
CON port	1
SD memory card interface	1
SD memory card	32 GB
RAM	256 MB
Flash	32 MB
Input voltage	100 to 240 VAC; 50 to 60 Hz; input current: 1A (max.)
Power consumption	18 W (max.)
Dimension (H x W x D)	1.73 x 11.81 x 17.32 in. (44 x 300 x 440 mm)
Weight	Net weight: 6.61 lb (3 kg); Gross weight: 11.02 lb (5 kg)
Environment	
Operating	Temperature: 32 to 104 °F (0 to 40 °C); humidity: 10 to 90% RH (non-condensing)
Storage	Temperature: 50 to 140 °F (-10 to 60 °C); humidity: 5 to 90% RH (non-condensing)
Others	
Certification	FCC and CE