

Product Description

1.1 Overview

SX1000, an SBC (Session Border Controller), is a member of VoIP product family developed by New Rock Technologies, Inc. It interconnects voice communication 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. SX1000 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 management of QoS.

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
- Registration and authentication of SIP terminal
- Support QoS
- Support SIP, RTP/RTCP, HTML/HTTP protocols
- Support MSRP protocol
- Access control through IP table
- Internetworking with up to 3 separate networks
- Surveillance and network failover
- Status and statistics report with TR069

1.3 Technical Specifications

Table 1-1 Technical Specifications

Name	Description
Functions	
Signaling and/or voice encryption	Supports TLS/SRTP and other encryption scheme
Voice processing	RTP packet forward, firewall traversal, local/remote user NAT traversal
Soft switch platform	Connections to multiple ITSP servers

Name	Description
Security	Access control through IP table, conceal of NAT address, encryption & decryption, blocking call from untrusted devices, discarding unknown messages
Registration and authentication	Support registration and authentication of SIP terminals
Protocols	SIP, RTP/RTCP, TLS, SRTP, HTTP, TCP/UDP, MSRP
QoS	Ensure voice and call quality
Surveillance of network	Network failover
Statistics	Visit history, online terminal list; call traces
Capability	
Concurrency	200
User registration	1000 SIP terminals
Delay	<30 microseconds
Management	
Interface	Web
Maintenance	RS-232 console, telnet, remote configuration and maintenance
Hardware	
Ethernet connector	RJ-45, 10/100 Base-T, auto sensing
Internal memory	128MB
Flash memory	8MB
CPU	Motorola PowerPC 8250
DSP	TI C5509
Input voltage	100~240 AC, 50~60 Hz, input current 1AMP max
Power consumption	70 Watt
Dimension (H x W x D)	44 × 440 × 440 mm, 1U high, 19''
Weight	Net weight: 5 kg Gross weight: 7.3 kg
Environment	
Operation	Temperature: 0~40, humidity: 10%~90% (non-condensing)
Non operation	Temperature: -10~60, humidity: 5%~90% (non-condensing)
Other specifications	
Telecommunication standard	FCC Part 15