

- Up to 2000 simultaneous calls
- Business process security
- Efficient management
- Hardware redundancy<sup>1</sup>

### Session border controller

**Eltex SBC** is an element of VoIP network that participates in call processing as a session border controller. The device provides signal protocol normalization, statistics collection and network protection against unauthorized access and attacks.

### Application

**Eltex SBC** is deployed at the border of the IP networks:

- between service providers' networks;
- between service provider network and Customer's corporate network;
- between service provider network and a public network.

### Features

- Ensuring security for service provider networks
- Public IP addresses translation
- Flexible distribution of redundancy routes
- Extended Firewall settings
- Statistics gathering
- Alarm log
- RADIUS access control
- Operation with subscribers behind NAT
- SDP analysis and verification
- Dynamic firewall
- RTCP control
- RTP sessions management
- Efficient management
- Black and white lists
- Integration with Eltex.EMS
- Load balancing between trunks
- Trunks with registration
- Flexible calls distribution according to established rules
- 1+1 redundancy<sup>1</sup>
- Interaction with the STUN server

### Bypassing NAT

NAT bypassing is a necessary feature that provides transparent transmission of voice and video traffic over IP networks. Different types of NAT are supported.



**SBC-1000**



**SBC-3000**

### Security

**Eltex SBC** provides network protection against unauthorized access and DoS attacks. Intellectual access management, ingress load limiting and network topology hiding ensure security of a network.

### Network topology hiding

**Eltex SBC** allows providing access to a carrier or corporate network from an untrusted connection, ensuring security of a Company business data.

The following mechanisms are used:

- intellectual IP addresses translation for signalling and media traffic;
- full B2BUA provides a required network isolation level.

### Redundancy

Complete redundancy is ensured by the cluster redundancy scheme and presence of backup power modules.

### Interconnection

**Eltex SBC** provides the opportunity of interaction between terminal devices and different SIP versions and extensions.

	SBC-1000	SBC-3000
Load	up to 500 calls	up to 2000 calls

<sup>1</sup> Not supported for SBC-1000.

## Features and capabilities

### Signaling protocols

- SIP, SIP-T/I

### SIP functionality

- SIP L5 NAT/Topology hiding
- SIP dialogue transparency
- SIP transit of unrecognized headers
- B2BUA as defined in RFC-3261
- RFC-2833 (Telephone Event)
- RFC-3264 (Offer/Answer)
- RFC-3204 (MIME Support)
- RFC-4028 (Session Timers)
- RFC-3326 (Reason Field)
- RFC-3262 (PRACK)
- RFC-3372 (SIP-T)
- B2BUA peering
- B2BUA access
- RFC-1889 (RTP)
- RFC-4566 (SDP)
- RFC-3261
- RFC-3581
- RFC-3515 (Refer Method)
- RFC-3265 (Subscribe)

### Media protocols

- RTP
- RTCP

### Media modes

- Flow-through

### Transport protocols

- TCP
- UDP
- TCP/UDP interworking

### Network protocols

- LACP
- IPv4

### Video codecs

- H.263
- H.263-1998
- H.264

### Performance

- Up to 500 simultaneous calls (SBC-1000)
- Up to 2000 simultaneous calls (SBC-3000)

### Redundancy<sup>1</sup>

- Warm standby 1+1 redundancy
- Automatic switching to backup
- Automatic synchronization of primary and backup equipment settings

### Security

- Up to 40 VLAN (up to 500 on SBC-3000)
- VPN (L2TP, PPTP)
- Rogue RTP detection
- Toll-free
- Protection against SIP/ICMP DoS flood
- Protection against overloading based on registration
- IP addresses filtering by geographical criterion

### Fax transmission

- T.38
- G.711

### Voice codecs

- G.711 (a-law,  $\mu$ -law), G.729, G.729 (A/B), G.723.1, G.722, G.728, G.726

### Interfaces (SBC-1000)

#### IP

- 2 x 1000BASE-X ports (2 slots for SFP modules)
- 3 x 10/100/1000BASE-T (RJ-45) ports
- 1 Console port RS-232 (DE-9)

#### USB port, 2 e-SATA ports (for installing SSD memory modules)

- Alarm logging
- Billing data recording

### Interfaces (SBC-3000)

#### IP

- 2 x 10/100/1000BASE-T (RJ-45)/1000BASE-X(SFP) ports
- 2 x 10/100/1000BASE-T (RJ-45) ports
- 1 Console port RS-232 (RJ-45)

#### 2 USB 2.0 ports, 2 slots for SATA HDD, form factor 2,5"

- Alarm logging
- Billing data recording

### Connection statistics

- Writing CDR files to the SATA storage
- Writing CDR files to the remote FTP server

### Management

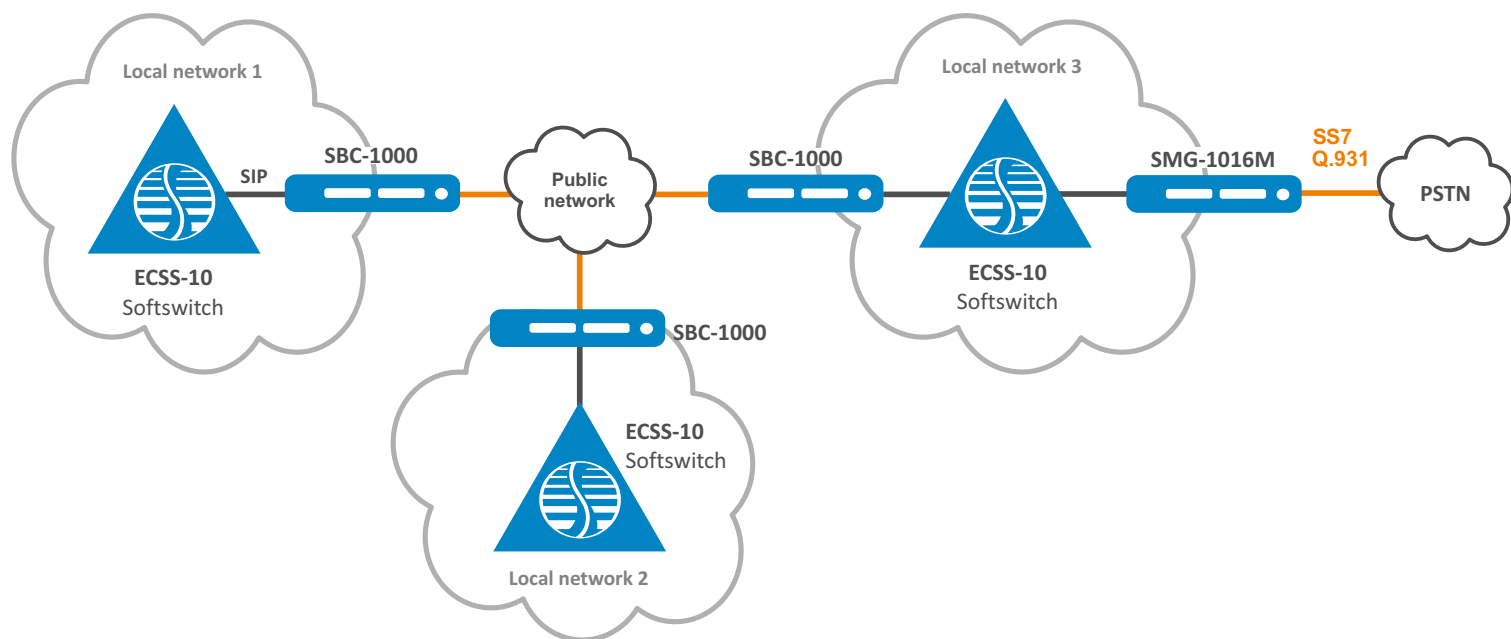
The following management means provides access right differentiation:

- MML console (SSH/Telnet)
- Web interface
- Active registration list monitoring and editing
- Possibility of integration with Eltex.EMS (SNMP)
- Dedicated Management port (OOB) 10/100/1000BASE-T (RJ-45) (only for SBC-3000)

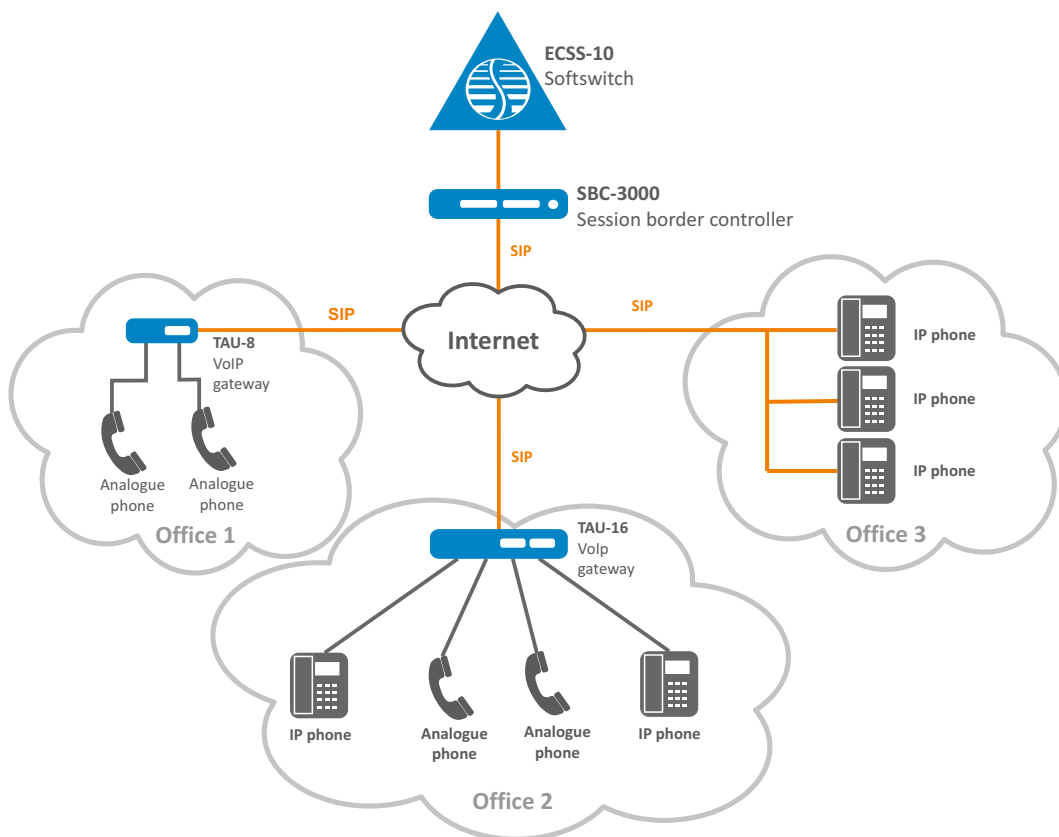
<sup>1</sup> Not supported for SBC-1000.

## Application

### Service providers' interaction



### «Virtual PBX» service



## Physical parameters


	SBC-1000	SBC-3000
Operating temperature	from 0 to +40 °C	
Operating humidity	no more than 80 %	
Noise level	from 44 to 60 dB	
Power supply	DC: 36–72 V AC: 100–240 V 47–63 Hz Power supply options: - one AC/DC power supply; - two hot-swappable AC/DC power supplies.	
Power modules	DC, power module PM100-48/12 100 W	AC, power module PM160-220/12 160 W
Maximum power consumption	50 W	
Dimensions (W x H x D)	430 x 45 x 260 mm	430 x 45 x 340 mm
Form factor	19", 1U	
Weight	3.2 kg	5.3 kg

## Ordering information

Name	Decription
<b>SBC-1000</b>	Session border controller SBC-1000
<b>SBC-3000</b>	Session border controller SBC-3000
<b>Supplementary modules</b>	
<b>PM160-220/12</b>	Power module PM160-220/12, 100–240 V AC, 160 W
<b>PM100-48/12</b>	Power module PM100-48/12, 36–72 V DC, 100 W
<b>Options</b>	
<b>SBC1-SW-500</b>	Up to 500 simultaneous calls for SBC-1000
<b>SBC3-RESERVE</b>	Redundancy activation for SBC-3000
<b>SBC3-SW-500</b>	Up to 500 simultaneous calls for SBC-3000
<b>SBC3-SW-1000</b>	Up to 1000 simultaneous calls for SBC-3000
<b>SBC3-SW-2000</b>	Up to 2000 simultaneous calls for SBC-3000
<b>SBC3-VNI-500</b>	Up to 500 VNI interfaces for SBC-3000

### Contact us

### About Eltex



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**Eltex Enterprise** is a leading Russian developer and manufacturer of communication equipment with 30 years of history. Complete solutions and their seamless integrability into the Customer's infrastructure are the priority growth areas of the company.