



# Enterprise Session Border Controller

Innovative technology powered by beroNet OS

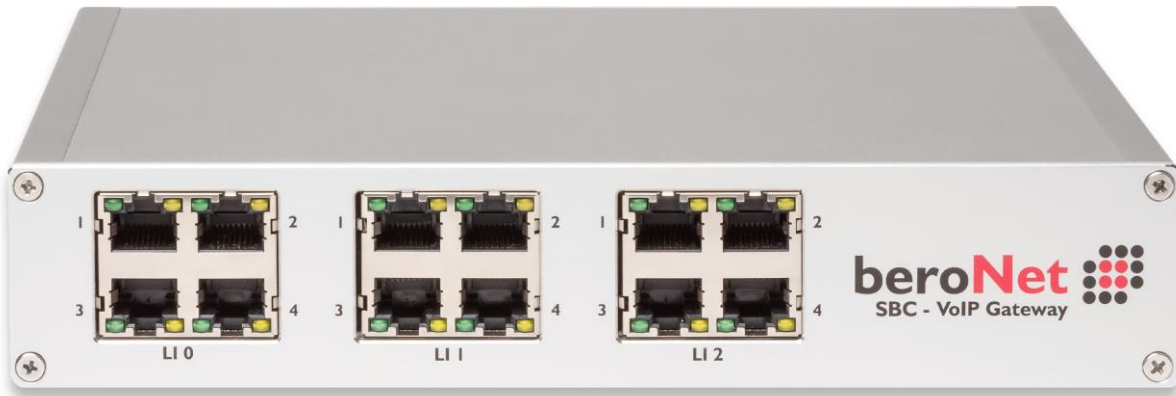


"In a space that requires constant growth and learning, beroNet has always gone far and beyond to provide us with the latest, compatible and most reliable hardware and services. It is 'this' that makes them indispensable."

Manikandan Chockalingam, CEO of CAL4CARE PTE LTD

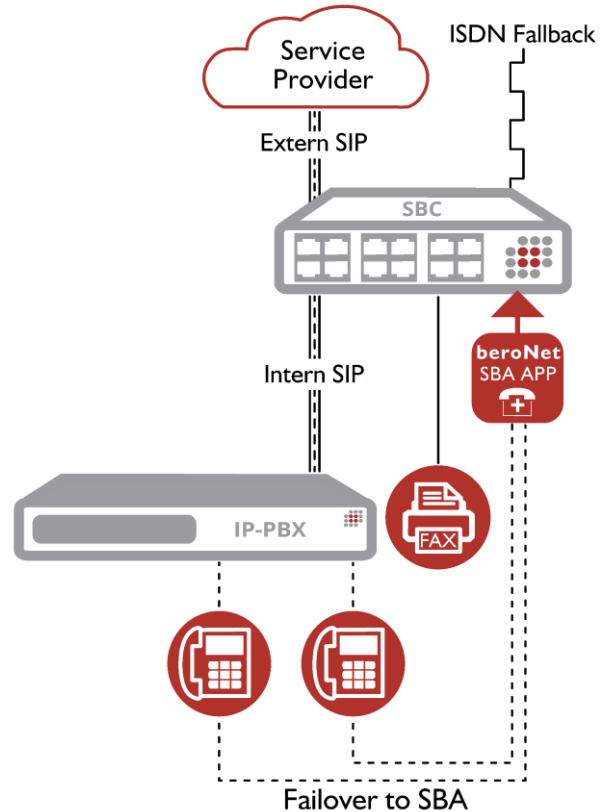
## OVERVIEW

beroNet modular VoIP E-SBCs are a security solution for VoIP networks and can be extended with add-on modules that enable any combination of technologies: FXS, FXO, BRI and PRI. With a range of SIP-to-SIP licenses, it is possible to make up to 128 simultaneous transparent sessions on all models, and combine them with up to 64 transcoded sessions on some models. beroNet OS provides compatibility between various IP PBX and VoIP operators and an easy configuration with the webGUI. All models include two network interfaces and can be managed via the beroNet cloud.



# Secure and simplify your VoIP Network

- Make IP PBX systems, VoIP providers and legacy PBX compatible
- Secure SIP communication separating internal and external SIP networks
- Secure the IP PBX with topology hiding
- SIP-DDoS Detection / Protection
- Firewall Access Control List
- Adapt SIP Headers
- Convert from TCP to UDP, RTP to SRTP, varying codecs
- Hybrid, legacy Modules available: ISDN (BRI, PRI), Analog (FXS, FXO), 2G/3G/4G
- Voice Failover options via PSTN or LTE, Survival Branch PBX App available
- Cloud managed



Cloud Managed



Compatible with any IPBX



Fast Installation



Tough, no moving parts



Energy Efficient



Modular & Flexible



100% Silent



Easy Expandable



## E-SBC Base Models

EXPANDABLE WITH ADDON MODULES

Model	NIC	Module Slots Available	Channels	Max Concurrent Sessions Transparent / Transcoding
BNSBC-M	2	2	16	128 / 8
BNSBC-L	2	3	64	128 / 32
BNSBC-XL	2	3	128	128 / 64

## E-SBC Standard Configurations

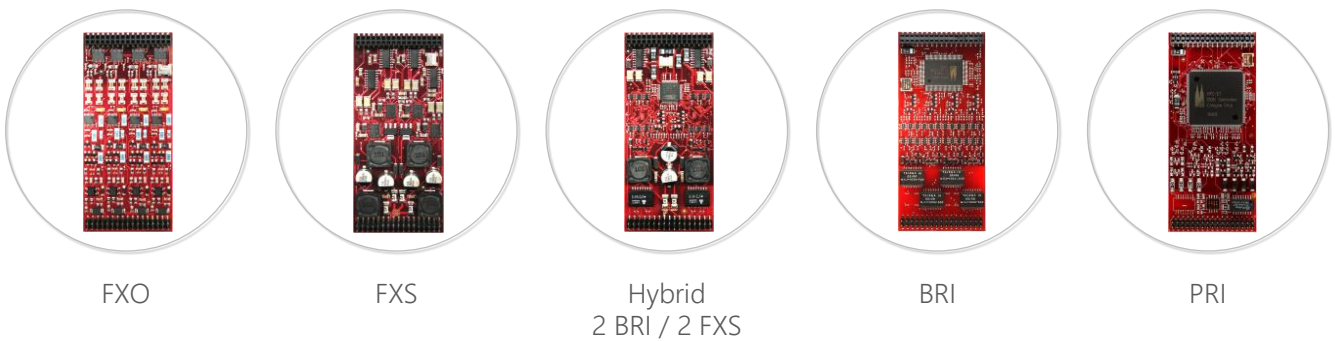
Model	Interface	Description	Concurrent PSTN Channels	Max Concurrent Sessions Transparent / Transcoding
EXPANDABLE WITH ADDON MODULES				
BNSBC-M-4FXO	Analog	4 FXO modular VoIP E-SBC	4	128 / 8
BNSBC-L-4FXO	Analog	4 FXO modular VoIP E-SBC	4	128 / 32
BNSBC-M-4FXS	Analog	4 FXS modular VoIP E-SBC	4	128 / 8
BNSBC-M-8FXS	Analog	8 FXS modular VoIP E-SBC	8	128 / 8
BNSBC-M-2HYB	Analog / ISDN	2 BRI and 2 FXS modular VoIP E-SBC	6	128 / 8
BNSBC-M-4BRI	ISDN	4 BRI HPC modular VoIP E-SBC	8	128 / 8
BNSBC-M-8BRI	ISDN	8 BRI HPC modular VoIP E-SBC	16	128 / 8
BNSBC-L-4BRI	ISDN	4 BRI HPC modular VoIP E-SBC	8	128 / 32
BNSBC-L-1E1	ISDN	1 PRI E1 HPC modular VoIP E-SBC	30	128 / 32
BNSBC-L-2E1	ISDN	2 PRI E1 HPC modular VoIP E-SBC	60	128 / 32
BNSBC-XL-2E1	ISDN	2 PRI E1 HPC modular VoIP E-SBC	60	128 / 64
NOT EXPANDABLE WITH ADDON MODULES				
BNSBC-L-24FXS	Analog	24 FXS non modular VoIP E-SBC	24	128 / 32

**General Specifications**

- Two or three module slots depending on the specific model (PRI, BRI, FXO, FXS, hybrid)
- Two 100Mbit LAN Ports (LAN / WAN)
- G.711 including echo cancellation (G.168/G.165, 128ms)
- Voice activity detection / comfort noise generation
- DTMF digit detection and generation
- T.38 Fax Relay (V.27, V.29 and V.17)
- SIP user agent IETF RFC3261 compatible
- SIP via UDP/TCP with optional TLS 1.2 support, SRTP
- “TDM Bridging” of two beroNet devices via PCM Bus
- Power supply: 110–230V, operating 12V DC at 2A
- Average power consumption: 6 Watts (24W max.)
- CE, FCC and ACMA compliant
- Storage temperature: -20° to 70°C / Operating temperature: 0° to 70°C
- Humidity: up to 90%, non-condensing
- Dimensions: L & XL - 218 x 170 x 42 mm
- Dimensions: M - 168 x 170 x 42 mm
- Weight: 800 g
- Mounting 1U, optional available: 19” rack brackets

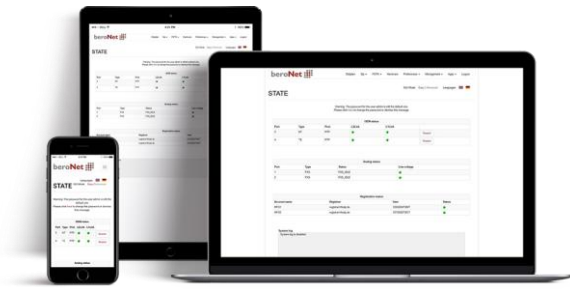
## Modular technology for control and flexibility

Fully expandable, modular beroNet VoIP E-SBCs can be custom built for any potential need. Depending on the model, they can be equipped with up to three modules, and be configured with any combination of BRI, PRI, FXS, and FXO, which makes them very flexible and highly adaptable to a diverse range of customer requirements. Our modular VoIP technology allows you to simply change the modules instead of the entire device.



## beronet Addon Modules

Interface	Model	Description
Analog	BNMO-4FXO	adds 4 FXO ports
Analog	BNMO-4FXS	adds 4 FXS ports
ISDN / Analog	BNMO-2HYB	adds 2 BRI and 2 FXS ports
ISDN	BNMO-4BRI	adds 4 BRI ports with High Precision Clock for DECT
ISDN	BNMO-1E1	adds 1 PRI E1 port with High Precision Clock for DECT
ISDN	BNMO-2E1	adds 2 PRI E1 ports with High Precision Clock for DECT
ISDN	BNMO-1PRI	adds 1 PRI T1/E1 port with High Precision Clock for DECT
ISDN	BNMO-2PRI	adds 2 PRI T1/E1 ports with High Precision Clock for DECT



## Powered by beroNet OS

beronet OS allows you to easily configure your VoIP E-SBCs via an intuitive web interface, to directly provision your devices with XML and to register them in the beroNet Cloud for remote monitoring and management. Take advantage of a deep range of intelligent and customizable features, expand the functionality of your VoIP E-SBC with apps and SBC software licenses.

## Meet your customers' requirements with the right SBC license

All E-SBC Models come with 2 free SIP-to-SIP concurrent calls. To add more concurrent sessions, licenses are required. There are two types of sessions. Sessions where the media is forwarded transparently and sessions in which the media goes through the hardware DSP (transcoding). The beroNet OS allows mixing of both session types, depending on the customer requirements.

### beronet E-Session Border Controller Software Licenses

SIP-to-SIP Transparent Sessions	Which E-SBC fits?	SIP-to-SIP Transcoding Sessions	Which E-SBC fits?
BNSBC-SESSION-TP-4	BNSBC-M, L and XL	BNSBC-SESSION-4	BNSBC-M, L and XL
BNSBC-SESSION-TP-8	BNSBC-M, L and XL	BNSBC-SESSION-8	BNSBC-M, L and XL
BNSBC-SESSION-TP-16	BNSBC-M, L and XL	BNSBC-SESSION-16	BNSBC-L and XL
BNSBC-SESSION-TP-32	BNSBC-M, L and XL	BNSBC-SESSION-32	BNSBC-L and XL
BNSBC-SESSION-TP-64	BNSBC-M, L and XL	BNSBC-SESSION-64	BNSBC-XL
BNSBC-SESSION-TP-128	BNSBC-M, L and XL		
BNSBC-SESSION-TP-Upgrade-x x stands for the amount of sessions	BNSBC-M, L and XL	BNSBC-SESSION-Upgrade-x x stands for the amount of sessions	Depending on model capacity

## 5 Good Reasons for beroNet E-SBCs



Less time training and more time with your customers



Cloud integration simplifies remote updates and backups



Free and premium support if you come across any issues



Flexibility and adaptability for long-term use



Enhanced with Apps for additional functionality



# Need more info?

Please use our support portal or check out our services!  
We can help you with training, consulting and development.



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