



LTE Session Border Controller

Innovative technology powered by beroNet OS



“No other Gateway is integrated faster and easier.”

Niels Hansen, Systems Engineer, Dierck Kommunikationstechnik Handels GmbH

OVERVIEW

beronet LTE SBCs allow an easy connection of SIP to mobile networks for voice calls as well as SMS messaging. Hybrid models enable add-on ISDN or analog ports in a single device to simply connect extra equipment or PSTN lines. With their two network interfaces and additional beroNet SIP-to-SIP licenses, take advantage of SBC functionalities to secure VoIP networks and make IP PBX systems and VoIP providers compatible. beroNet LTE SBCs are an ideal solution for voice failover via LTE and can be safely remote managed via the beroNet Cloud.



LTE non modular Models

WITH DUAL NIC AND 2 SIP-TO-SIP SESSIONS FREE

Model	NIC	Description	Concurrent LTE Channels	Max Concurrent SIP-to-SIP Sessions Transparent / Transcoding
BNSBC-M-2LTE	2	SBC with 2 VoLTE ports	2	128 / 8
BNSBC-M-4LTE	2	SBC with 4 VoLTE ports	4	128 / 8
BNSBC-M-6LTE	2	SBC with 6 VoLTE ports	6	128 / 8

Technical Specifications

- 2, 4 or 6 LTE ports (2, 4 or 6 SIM cards)
- 2G (GSM) / 3G (UMTS) / 4G (VoLTE)
- 2G Bands: B3(1800), B8(900)
- 3G Bands: B1(2100), B8(900)
- 4G Bands: B3(1800), B7(2600), B20(800), B1(2100), B8(900)
- SMS service (Text and PDU)
- SMS via WebGUI or API to connect custom applications
- Supplementary LTE services (CLIP, CLIR)
- Codecs: G.723.1 and Annex A, G.729 a/b, G.726, (up to 4 channels)
- G.711 including echo cancellation (G.168/G.165, 128ms)
- Voice activity detection / comfort noise generation
- DTMF digit detection and generation
- SIP user agent IETF RFC3261 compatible
- SIP over UDP/TCP with optional TLS 1.2 support, SRTP
- Two 100Mbit network interfaces (LAN / WAN)
- Power supply: 110–230V, operating 12V DC at 2A
- Average power consumption: 6 Watts (24W max.)
- Storage temperature: -20° to 70°C
- Operating temperature: 0° to 70°C
- Humidity: up to 90%, non-condensing
- Dimensions: M – 168 × 170 × 42 mm
- Dimensions: L – 218 × 170 × 42 mm
- Weight: M - 800 g, L – 1000 g
- Mounting 1U, optional available: 19" rack brackets
- Optional antenna with 2,5 m cable and magnetic foot
- CE, FCC and ACMA compliant



LTE hybrid standard Configurations

WITH DUAL NIC AND 2 SIP-TO-SIP SESSIONS FREE

Model	Description	LTE with additional interfaces	Concurrent Channels LTE / PSTN	Max Concurrent SIP-to-SIP Sessions Transparent/Transcoding
BNSBC-M-2LTE4FXS	SBC with 2 VoLTE and 4 FXS ports	Analog	2 / 4	128 / 8
BNSBC-M-4LTE4FXS	SBC with 4 VoLTE and 4 FXS ports	Analog	4 / 4	128 / 8
BNSBC-M-2LTE4FXO	SBC with 2 VoLTE and 4 FXO ports	Analog	2 / 4	128 / 8
BNSBC-M-4LTE4FXO	SBC with 4 VoLTE and 4 FXO ports	Analog	4 / 4	128 / 8
BNSBC-M-2LTE2S02FXS	SBC with 2 VoLTE, 2 BRI and 2 FXS ports	ISDN/Analog	2 / 4 / 2	128 / 8
BNSBC-M-4LTE2S02FXS	SBC with 4 VoLTE, 2 BRI and 2 FXS ports	ISDN/Analog	4 / 4 / 2	128 / 8
BNSBC-M-2LTE4BRI	SBC with 2 VoLTE and 4 BRI ports	ISDN	2 / 8	128 / 8
BNSBC-M-4LTE4BRI	SBC with 4 VoLTE and 4 BRI ports	ISDN	4 / 8	128 / 8
BNSBC-L-2LTE1PRI	SBC with 2 VoLTE and 1 PRI ports	ISDN	2 / 30	128 / 32
BNSBC-L-4LTE1PRI	SBC with 4 VoLTE and 1 PRI ports	ISDN	4 / 30	128 / 32

ISDN Specifications

- Connects SIP with ISDN
- ISDN Ports separately as TE or NT mode switchable in software (jumper free)
- Termination resistors (100 Ohm) for every port separately configurable
- Layer 2 is Q.921 and Layer 3 is Q.931 (EuroISDN DSS1) compatible
- DSS1 Feature Set: CLIP/No-Screening, CLIR, COLP, UUS, MCID, CD, CNIP AOC-D
- Q.SIG Feature Set: CNIP

Analog FXO Specifications

- Connects SIP to analog for connection to the public telephone network or to an internal analog port of the PBX
- Flash hook
- CLIP, CNIP

Analog FXS Specifications

- Extends analog devices to SIP (telephone, fax, alarm system, EC cash)
- Hold, Retrieve, Transfer / MWI (Stutter, FSK)
- CLIP, CNIP



PRI

BRI

2 BRI and 2 FXS

FXS

FXO

Your special hybrid Configuration by beroNet

beronet modular design increases adaptability and enables to meet any unique need. Request beroNet to build an Hybrid beroNet VoLTE SBC based on your customer requirements with the following addon modules.

beronet addon Modules for hybrid LTE Configuration on request

Interface	Module	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

19 inch rack mount Brackets, optionally available

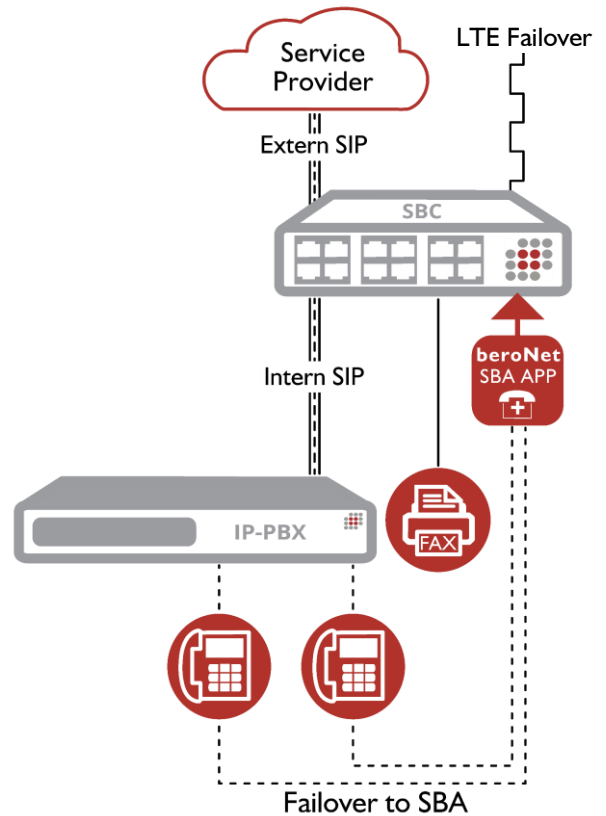
SBC LTE Model	Bracket Code	SBC LTE Model	Bracket Code
BNSBC-M-2LTE	BF19Bracket	BNSBC-M-6LTE	BNSBC19BracketL
BNSBC-M-4LTE	BF19Bracket		
BNSBC-M-2LTE4FXS	BF19Bracket	BNSBC-M-4LTE4FXS	BNSBC19BracketL
BNSBC-M-2LTE4FXO	BF19Bracket	BNSBC-M-4LTE4FXO	BNSBC19BracketL
BNSBC-M-2LTE2S02FXS	BF19Bracket	BNSBC-M-4LTE2S02FXS	BNSBC19BracketL
BNSBC-M-2LTE4BRI	BF19Bracket	BNSBC-M-4LTE4BRI	BNSBC19BracketL
BNSBC-L-2LTE1PRI	BF19Bracket	BNSBC-L-4LTE1PRI	BNSBC19BracketL

Made in Germany



Secure and simplify your VoIP Network

- Make IP PBX systems and VoIP providers 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
- Voice Failover options via LTE, Survival Branch PBX App available
- Cloud managed



Cloud Managed



Compatible with any IPBX



Fast Installation



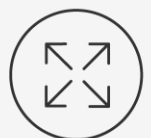
Tough, no moving parts



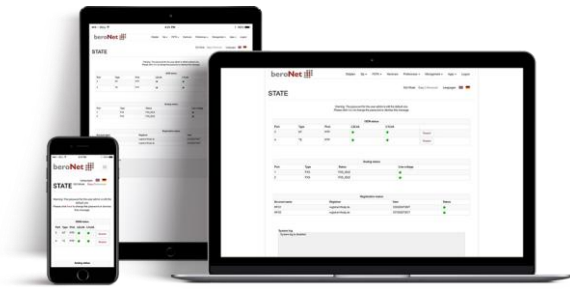
Energy Efficient



100% Silent



Easy Expandable



Powered by beroNet OS

beroNet OS allows you to easily configure your VoIP 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 SBC with apps and SBC software licenses.

Meet your customers' requirements with the right SBC license

All 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 traverses the hardware DSP (transcoding). The beroNet OS allows mixing of both session types, depending on the customer requirements.

beroNet Session Border Controller Software Licenses

SIP-to-SIP Transparent Sessions	Which SBC fits?	SIP-to-SIP Transcoding Sessions	Which 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 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



Enhance compatibility between VoIP providers and IP PBX



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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