

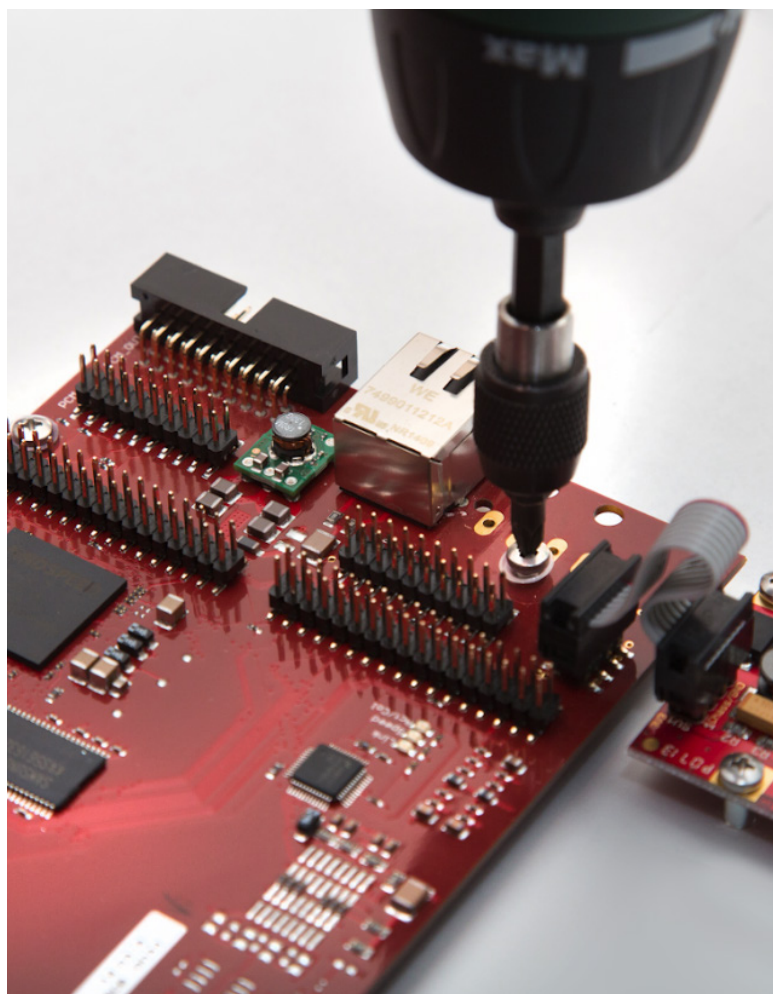


Europe's leading manufacturer
of VoIP Access Technologies

The leading manufacturer of innovative communication technology; focused on solving VoIP market challenges.

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beroNet is a German company founded in 2002 by three engineers with many years of experience in VoIP Access Technologies. The products and technologies developed by beroNet are suitable for enterprise and service provider markets and enable reliable and efficient VoIP, ISDN, Analog & GSM connectivity technologies. All products are developed and manufactured in Germany.

Our mission is to be the leading manufacturer of innovative communication technology; focused on solving VoIP market challenges.

beroNet products are designed to be easy to understand and configure. We place further emphasis on building hardware that you can install and forget. For the rare occasion that a beroNet product requires support, we offer a variety of support services.



Welcome to beroNet!

beroNet is emerging as the leading designer and manufacturer for PSTN & GSM/LTE VoIP Access Technologies through high quality VoIP hardware and services.

Dear VoIP Hero,

My focus at beroNet is to create VoIP hardware and services that help you achieve hero status within your company and among your customers. To accomplish this our development team creates hardware with an intuitive and easy-to-use interface. We also hold regular internal trainings and activities to keep our team up-to-date and able to advise you on your next project.

When you encounter an installation challenge or a potential customer that you are uncertain how to help, contact our team and we will help you overcome the challenge and win the customer.

I am certain that you will be pleased with both the service and products you receive from beroNet.

If you ever have a bad experience, or are disappointed with our service - please contact me directly. You can reach me by email at cr@beronet.com or by phone at +49 (0)30 259389 15.

May all your future endeavors be successful.



Sincerely,
Christian Richter
CEO at beroNet

VoIP Gateways

Modular VoIP Gateways that fit any need



“ The beroNet Gateway proved itself to be a robust and fail-proof carrier grade system from day one, handling up to 5000 calls per day. ”

Ercan Yopalak, IT Department Zehnder GmbH

OVERVIEW

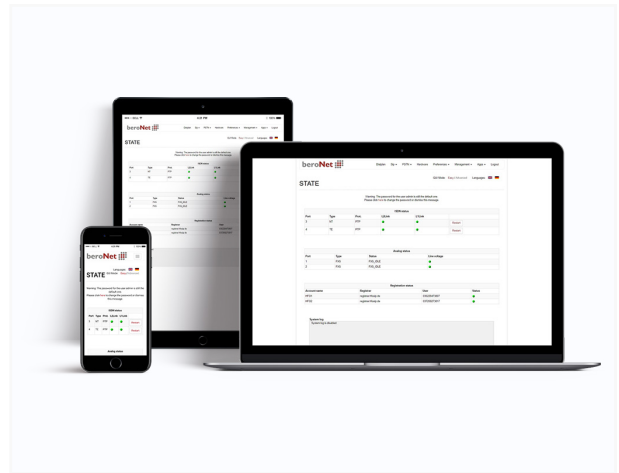
beroNet Modular VoIP Gateways hold up to two modules. Fully expandable, the devices can be custom built for any potential need. Powered by beroNet OS you can add SBC Software Licenses to turn your modular VoIP Gateway into a session border controller. With Apps you can transform a Modular VoIP Gateway into a Survival Branch Appliance or Mini-Appliance.

VOIP GATEWAYS

beroNet OS

Beautifully designed
to decrease stress and
increase success

An intuitive interface that is easy to use allowing the entire VoIP Gateway to be managed using a Web browser. Using beroNet OS you can connect your VoIP Gateways with the beroNet Cloud, allowing you to monitor and manage them from any device connected to the internet.



5 Minute Installation

Save time in dialplan configuration and port grouping by using an automatic configuration wizard.



Easy to configure

Use a responsive Web GUI to easily configure your VoIP Gateway.



Compatible with any VoIP Provider

Use your VoIP Gateway with any VoIP Provider



SBC

Bridge two different IP-PBX systems and create SIP failover systems using the built-in SIP-to-SIP.



Compatible with any PBX system

Use your VoIP Gateway with any PBX or IP-PBX system.



beroNet Cloud Integration

With the beroCloud you have complete control of your beroNet VoIP Gateway.



Expandable with Apps

Apps include beroNet's Survival Branch Appliance, OpenVPN and Asterisk.



Easy provisioning with XML

Directly provision beroNet Gateway devices using XML.

VOIP GATEWAYS

Modular VoIP Gateways



Overview

The beroNet Gateways are modular and can be equipped with up to two modules. Digital ISDN (BRI/PRI), analog (FXS/FXO) as well as GSM/LTE are available and can be combined in any combination.

Thanks to their flexibility the beroNet VoIP Gateways always offer right solution for different customer requirements.

Modular Technology for Control and Flexibility

beroNet Gateway's modular design enables this device to meet any unique need. Modular VoIP technology increases adaptability and flexibility by allowing you to change the modules instead of the entire device if it is needed for a different VoIP installation.



Cloud
Managed



Compatible with
any IPBX



Fast
Installation



Though, no
small parts



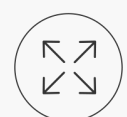
Energy
Efficient



Modular
& Flexible



100%
Silent



Easy
Expandable

Base Models

EXPANDABLE WITH ADDON MODULES

Model	Max Concurrent Channels	Module Slots Available
BF400Box	16	2
BF1600Box	64	2
BF6400Box	128	2

Standard Configurations

ISDN INTERFACE

Model	Description	Additional Module Slots Available
BF4002S02FXSBox	2 BRI/S0 / 2 FXS modular Gateway	1
BF4004S0Box	4 BRI/S0 modular Gateway	1
BF4008S0Box	8 BRI/S0 modular Gateway	0
BF4001E1Box	1 PRI E1 modular Gateway – fractional E1 (16 concurrent channels)	1
BF16001E1Box	1 PRI E1 modular Gateway	1
BF16002E1Box	2 PRI E1 modular Gateway	1

ANALOG INTERFACE

Model	Description	Additional Module Slots Available
BF4004FXOBox	4 FXO modular Gateway	1
BF4004FXSBox	4 FXS modular Gateway	1
BN16FXSfax_B	16 FXS Gateway, 16 Voice & Fax channels, incl. BreakOut Box	0
BN16FXSfax_C	16 FXS Gateway, 16 Voice & Fax channels	0

beroNet Modules

ISDN INTERFACE

Model	Description
BNMO-2HYB	adds 2 BRI and 2 FXS ports
BNMO-4BRI	adds 4 BRI ports
BNMO-1E1	adds 1 PRI/E1 port
BNMO-2E1	adds 2 PRI/E1 ports
BNMO-1PRI	adds 1 PRI T1/E1 port
BNMO-2PRI	adds 2 PRI T1/E1 ports

ANALOG INTERFACE

Model	Description
BNMO-2HYB	adds 2 BRI and 2 FXS ports
BNMO-4FXO	adds 4 FXO ports
BNMO-4FXS	adds 4 FXS ports

beroNet VoIP Gateways can be equipped with up to two modules which makes them very flexible and highly adaptable to a divers range of client requirements.

GENERAL SPECS

- 2 module slots (PRI, BRI, FXO, FXS, hybrid)
- Codecs: G.723.1 and Annex A, G.729 a/b, G.726, (up to: 4 channels with BF400, 16 channels with BF1600, 64 channels with BF6400)
- G.711 and Echo Cancellation, (up to: 16 channels with BF400, 64 channels with BF1600, 128 channels with BF6400)
- T.38 Fax Relay (V.27, V.29 and V.17) (up to: 4 channels with BF400, 16 channels with BF1600, 32 channels with BF6400)
- Voice activity detection /comfort noise generation
- DTMF digit detection and generation
- SIP user agent IETF RFC3261 compliant
- SIP over UDP/TCP with optional TLS support
- "TDM Bridging" of two beroNet devices via PCM Bus
- Optional CAPI 2.0 available (Fax, voice)
- Power supply: 110-230V, operating 12V DC at 2A
- Compliance: CE (EN55022, EN55024, EN60950)
- High quality Aluminium Housing
- Dimensions: 168 x 168 x 42 mm, weight: 800 g
- Mounting: IU industry wallmountable chassis with optional 19" brackets
- Storage temperature: -20° to 70°C
- Operating temperature: 0° to 40°C, humidity: up to 90 %, non-condensing

ISDN

- Connects SIP with ISDN
- Each Port is configurable in NT or TE Mode with PIN interchanging
- Termination resistors (100 Ohm) for every Port separately configurable
- TE / NT and Termination per Port switchable in Software (Jumperfree)
- 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 FXS

- Extends analog devices to SIP (Telephon, Fax, alarm system, EC Cash)
- Hold, Retrieve, Transfer / MWI (Stutter, FSK)
- CLIP, CNIP

ANALOG FXO

- Connects SIP to analog (FXO), for connection to the public telephone network or to an internal analog port of the PBX
- Flashhook
- CLIP, CNIP

VOIP GATEWAYS

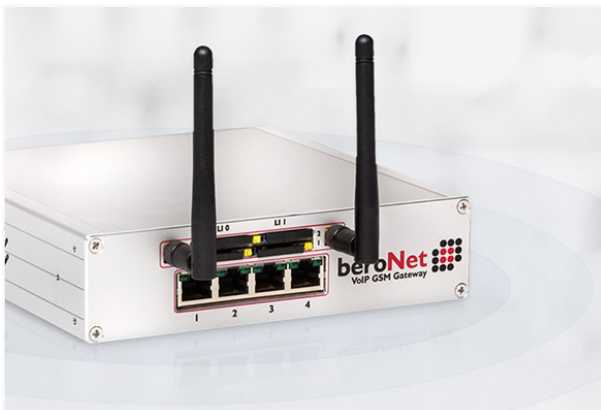
GSM/LTE Gateways

Overview

The beroNet GSM Gateways connect SIP to GSM and the beroNet VoLTE Gateways connect SIP to LTE. All support voice and SMS messaging and are ideal solutions for least cost routing. With an additional ISDN module, landline calls, mobile network calls as well as calls to VoIP providers can be made.

Features

- Supports voice and SMS transmission
- Expandable with a supplementary module (BRI, FXO, FXS, GSM)
- Cloud managed
- 19" rack or wall mountable
- High quality Aluminium Housing
- Callback Application available



GSM Models

EXPANDABLE WITH ADDON MODULES

Model	Description	Additional Module Slots Available
BF4002GSMBBox	2 GSM Modular VoIP Gateway	1
BF4004GSMBBox	4 GSM Modular VoIP Gateway	0



beroNet VoLTE Gateway

The beroNet VoLTE Gateway includes 2 or 4 LTE ports. It connects SIP with VoLTE and supports voice as well as SMS messaging. The Gateway can be used as a Least Cost Solution. With a supplementary ISDN Modul, calls to fixed lines, mobile as well as calls via VoIP providers are possible. The beroNet VoLTE Gateway can be easily and safely remote managed, configured and updated via the beroNet Cloud.

LTE Models

EXPANDABLE WITH ADDON MODULES

Model	Description	Additional Module Slots Available
BF4002LTEBox	2 LTE Modular VoIP Gateway	1
BF4004LTEBox	4 LTE Modular VoIP Gateway	0

GSM / VOLTE TECHNICAL SPECIFICATIONS

- 2 or 4 Ports (2 or 4 SIM cards)
- GSM Protocol: 2G / Quadband (850/900/1800/1900 Mhz)
- LTE Protocol: 2G/3G/4G (VoLTE)
- SMS service (Text and PDU)
- Supplementary GSM services (CLIP, CLIR)
- Codecs: G.723.1 and Annex A, G.729 a/b, G.726, (up to 4 channels)
- G.711 and echo cancellation including up to 16 channels
- G.168/G.165 echo cancellation with echo path change detection, up to 128ms
- Voice activity detection / comfort noise generation
- DTMF digit detection and generation
- T.38 Fax Relay (V.27, V.29 and V.17) (up to 4 channels)
- SIP user agent IETF RFC3261 compatible
- SIP over UDP/TCP with optional TLS support (SIP signalling only)
- Power supply: 110-230V, operating 12V DC at 2A
- Compliance: CE (EN55022, EN55024, EN60950)
- Dimensions: 168 x 168 x 42 mm
- Weight: 800g
- Mounting: 1U, optional available: 19" rack brackets, wall-mountable

VOIP GATEWAYS

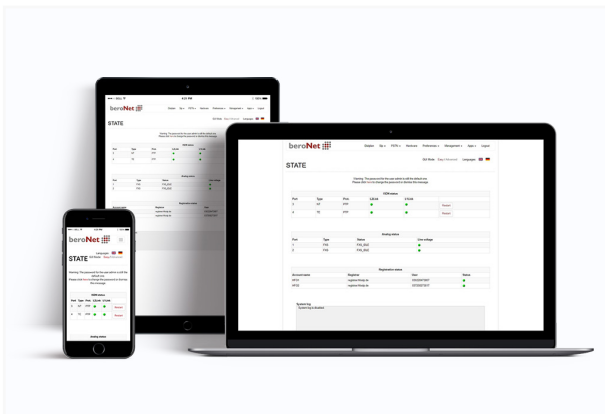
Small Business Line

Overview

The beroNet Small Business Line was developed especially for the VoIP Gateway demands of small and medium sized companies. It is available as digital (ISDN), analog (FXS/FXO), or hybrid (BRI/FXS) version. The Small Business Line is the ideal entry-level device (not expandable).

Powered by beroNet OS

beroNet OS allows you to manage your VoIP Gateway using your Web Browser, register to manage and monitor the device in the beroNet Cloud, and take advantage of SBC functionality by adding a SBC Software license. Using the beroNet App Market you can expand the functionality of your VoIP Gateway with apps like the beroNet Survival Branch Appliance (SBA) App, OpenVPN, and OpenPBX.



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Easy
Expandable

Standard Models

ISDN GATEWAYS

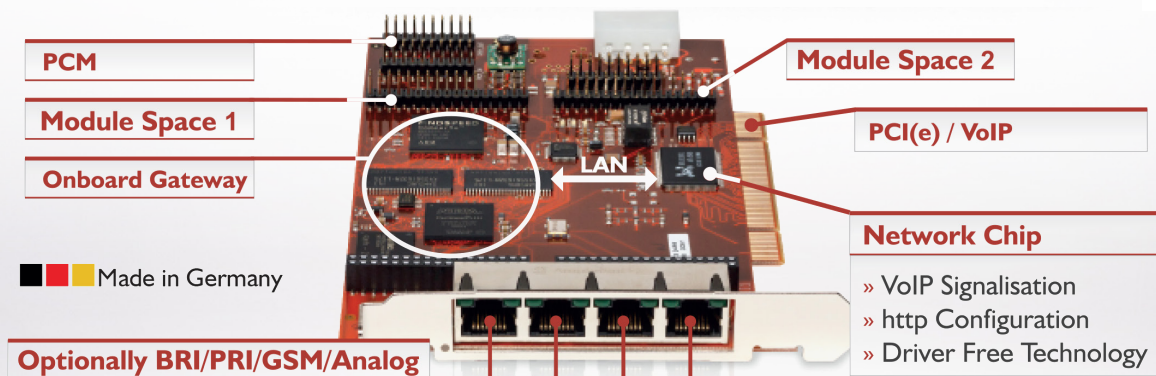
Model	Description
BFSB1S0	1 BRI/S0 Small Business Line Gateway
BFSB2S0	2 BRI/S0 Small Business Line Gateway
BFSB2HY	2 BRI/S0 and 2 FXS Small Business Line Gateway
BFSB2S02XO	BRI/S0 and 2 FXO Small Business Line Gateway

ANALOG GATEWAYS

Model	Description
BFSB4XO	4 FXO Small Business Line Gateway
BFSB4XO4XS	4 FXO / 4 FXS Small Business Line Gateway
BFSB4XS	4 FXS Small Business Line Gateway

TECHNICAL SPECIFICATIONS

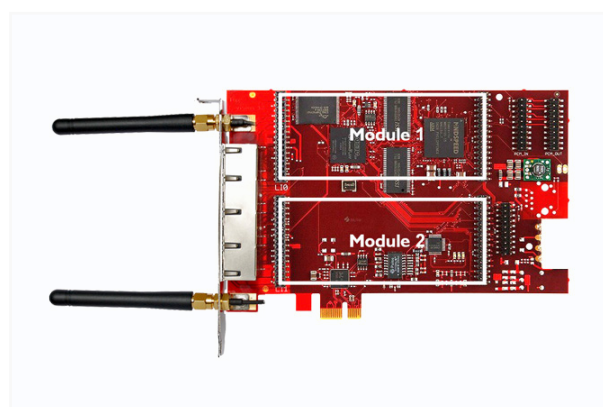
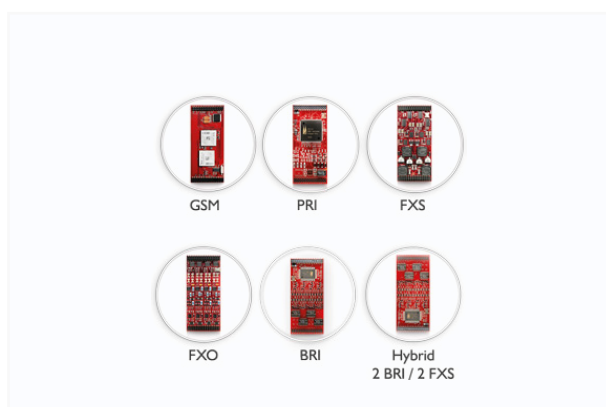
- G.168/G.165 echo cancellation with echo path change detection, up to 128ms
- Voice activity detection / comfort noise generation
- DTMF digit detection and generation
- T.38 fax relay (V.27, V.29 and V.17)
- SIP user agent IETF RFC3261 compliant
- SIP over UDP/TCP with optional TLS support (SIP signaling only)
- TDM bridging over 2 beroNet Gateways through PCM bus, 8.192 kB/s
- Codecs: G.723.1 and Annex A, G.729 a/b, G.726, G.711 u/a
- 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
- Q.SIG feature set: CNIP
- 10/100 Mbit LAN port
- Power supply: 12 V
- Dimensions: 168 x 168 x 42 mm
- Weight: 500g



VOIP GATEWAYS

PCIe VoIP Cards

- Codecs: G.723.1 and Annex A, G.729 a/b, G.726 (up to 32 channels), G.711 u/a (up to 128 channels)
- G.168/G.165 echo cancellation with echo path change detection, up to 128ms
- Voice activity detection / comfort noise generation
- DTMF digit detection and generation
- T.38 Fax Relais (V.27, V.29 and V.17)
- SIP User Agent IETF RFC3261 conform
- SIP via UDP/TCP with optional TLS support
- ITDM bridging over 2 berofix devices through PCM bus interconnection, 8.192 kB/s
- PCI 2.2 conform 3,3V (Realtek 8139CL Chipsatz), 5V Slot compatible, min. 3,3V
- PCI express 1.1 compliant (chipset Realtek 8111C)
- Compliance: CE (EN55022, EN55024, EN60950)



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Managed



Compatible with
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Installation



Though, no
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Energy
Efficient



Modular
& Flexible



100%
Silent



Easy
Expandable

Base Models

EXPANDABLE WITH ADDON MODULES

Model	Max Concurrent Channels	Module Slots Available
BF400e	16	2
BF1600e	64	2
BF6400e	128	2

Standard Configurations

ISDN INTERFACE

Model	Description	Additional Module Slots Available
BF4002S02FXSe	2 BRI/S0 / 2 FXS PCIe Card	1
BF4004S0e	4 BRI/S0 PCIe Card	1
BF16001E1e	1 PRI E1 PCIe Card	1

ANALOG INTERFACE

Model	Description	Additional Module Slots Available
BF4004FXOe	4 FXO PCIe Card	1
BF4004FXSe	4 FXS PCIe Card	1

GSM INTERFACE

Model	Description	Additional Module Slots Available
BF4002GSMe	2 GSM PCIe Card	1
BF4004GSMe	4 GSM PCIe Card	0

Session Border Controller

Innovative technology powered by beroNet OS

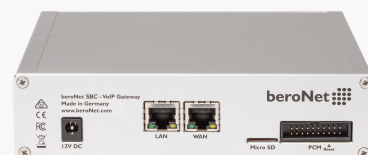
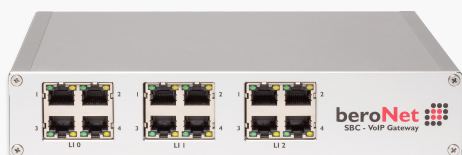
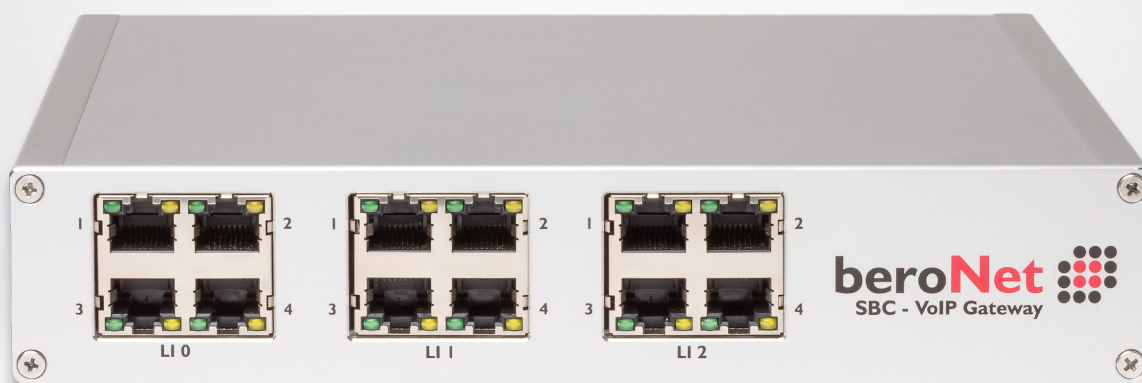


"In a space that requires constant growth and learning, beroNet has always gone far and beyond to provide us with the latest, compatible and most reliable hardware and services. It is 'this' that makes them indispensable."

Manikandan Chockalingam, CEO of CAL4CARE PTE LTD

OVERVIEW

beroNet modular VoIP SBCs are a security solution for VoIP networks. Depending on the model, up to three beroNet modules can be added, offering any combination of BRI, PRI, FXS and FXO interfaces. Configuration is easy done via the beroNet WebGUI. The VoIP SBCs are compatible with various IP-PBX and VoIP providers and can be managed via the beroNet cloud. All models have two network interface cards.

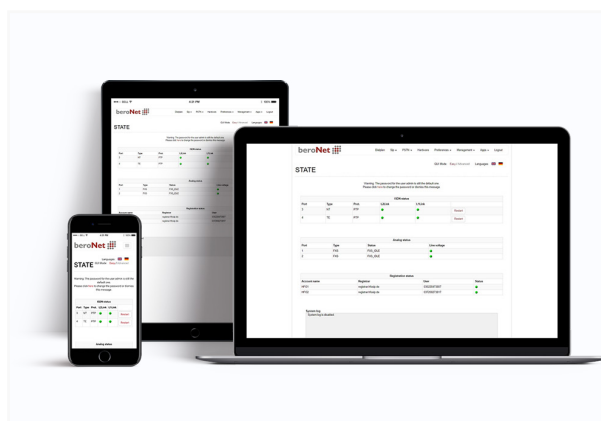


Overview

beroNet modular VoIP SBCs are a security solution for VoIP networks with up to 64 possible sessions. All SBC models have two network interfaces and are able to offer any combination of BRI, PRI, FXS and FXO interfaces. Configuration is easy done via the beroNet WebGUI. The beroNet SBA application offers additional security. The VoIP SBCs are compatible with various IP-PBX and VoIP providers and can be managed via the beroNet cloud.

Powered by beroNet OS

beroNet OS allows you to manage your VoIP SBC using your Web Browser, register to manage and monitor the device in the beroNet Cloud, and take advantage of SBC functionality by adding SBC Software Licenses. Using the beroNet App Market you can expand the functionality of your VoIP SBC with apps like the beroNet Survival Branch Appliance (SBA) App, OpenVPN, and OpenPBX.



Base Models

EXPANDABLE WITH ADDON MODULES

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

Standard Configurations

SBC WITH ISDN INTERFACE

Model	Description	Max Concurrent PSTN Channels	Max Concurrent Sessions
BNSBC-M-4BRI	4 BRI/S0 Modular VoIP Session Border Controller	16	8
BNSBC-M-2HYB	2 BRI/S0 and 2 FXS Modular VoIP Session Border Controller	16	8
BNSBC-L-4BRI	4 BRI/S0 Modular VoIP Session Border Controller	64	32
BNSBC-L-1PRI	1 PRI E1/T1 Modular VoIP Session Border Controller	64	32
BNSBC-L-2PRI	2 PRI E1/T1 Modular VoIP Session Border Controller	64	32
BNSBC-XL-2PRI	2 PRI E1/T1 Modular VoIP Session Border Controller	128	64

SBC WITH ANALOG INTERFACE

Model	Description	Max Concurrent PSTN Channels	Max Concurrent Sessions
BNSBC-M-4FXS	4 FXS Modular VoIP Session Border Controller	16	8
BNSBC-M-4FXO	4 FXO Modular VoIP Session Border Controller	16	8
BNSBC-L-4FXO	4 FXO Modular VoIP Session Border Controller	64	32

FEATURES

- Make IPBX Systems, VoIP Providers and legacy PBX compatible
- Adapt SIP Headers
- T.38 fax relay (V.27, V.29 and V.17)
- Secure the IPBX with topology hiding, and common attack prevention
- Easy to manage via WebGUI
- Convert from TCP to UDP, RTP to SRTP, varying codecs
- Hybrid: legacy Modules on available: ISDN (BRI, PRI), Analog (FXS, FXO), 2G/3G/4G,
- Failover options via PSTN or GSM, Survival Branch PBX App available
- Tough, no moving parts
- low power consumption
- Cloud managed
- Expandable additional Gateways and Apps

GENERAL SPECS

- Two or three module slots depending on the specific model
- microSD card slot
- 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 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 (24 Watt maximum)
- CE, FCC and ACMA compliant

DIMENSIONS AND WEIGHT

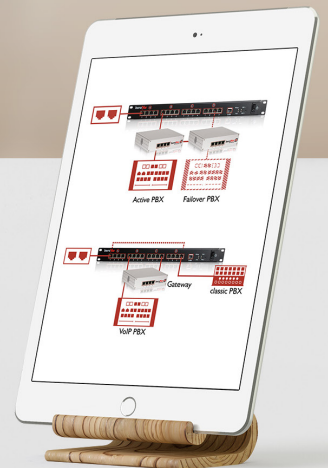
- Dimensions: L & XL - 218 x 170 x 42 mm; M - 168 x 170 x 42 mm
- Weight: 500 g
- Mounting: 1 U; optionally available 19" rack brackets; wall-mountable

ENVIRONMENT

- Storage temperature: -20° to 70°C / Operating temperature: 0° to 40°C
- Humidity: up to 90%, non-condensing

Failover Switch

A solution device for PBX Clustering and failover scenarios



“The beroNet Failover Switch is a high quality ISDN switch, that allows us to generate a secure Hardware Backup for our cluster. Its reliability and robustness plays a crucial role for our VoIP Solutions.”

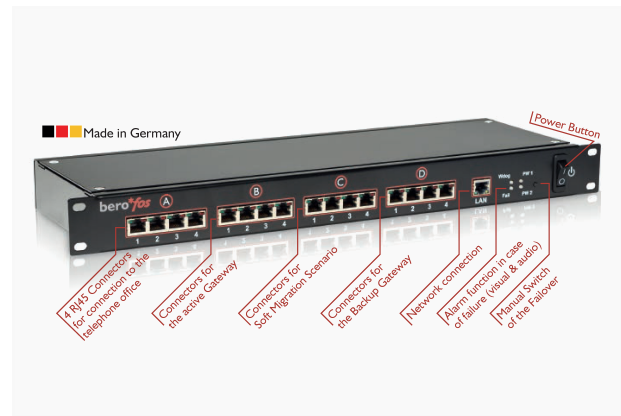
Laurent Demange, Head of Product & Sales Avencall SAS

OVERVIEW

The beroNet Failover Switch is a reliable hardware solution for telephone system clustering as well as Failover scenarios. It enables a physical reconnection of analog, BRI or PRI connections. It can be used in two scenarios: the Failover Mode or the Bypass Mode.

Overview

The beroNet Failover Switch (BNFOS) provides an effective way for dealing with such unexpected events by re-routing the lines to a back-up line when undesirable changes are detected. Therefore beroNet provides beroNet Failover Switch, a solution device for PBX Clustering and failover scenarios that requires a physical reconnection of analog, BRI or PRI lines.

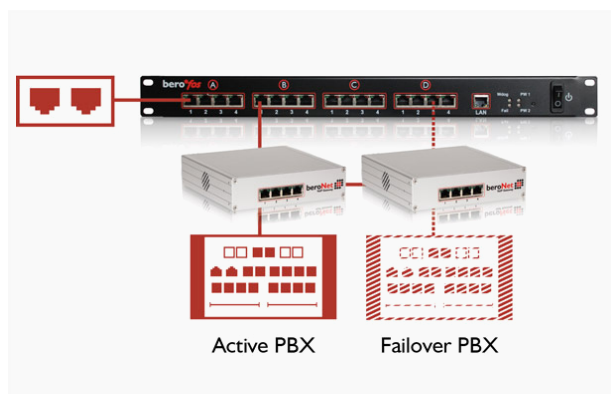


A solution device for PBX Clustering and failover scenarios



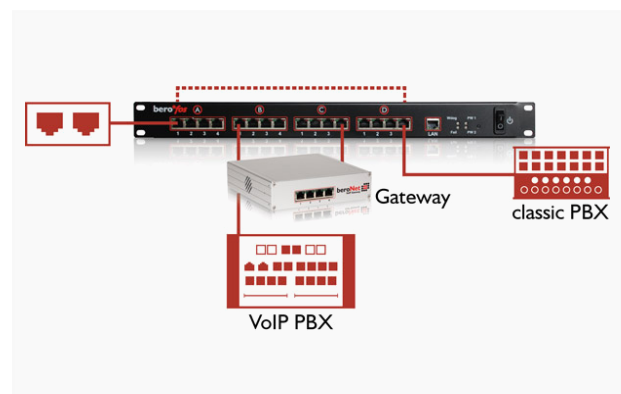
Failover Scenario

The failover scenario grants the smooth and reliable operation of two PBXs side by side, where the second one will be switched to active only after the failure of the first one in order to reduce downtime to a minimum (see figure). This scenario is not only interesting in failure situations, it could also be used in cases of maintenance, repair or upgrade of your telecommunications equipment.



Bypass Scenario

The bypass scenario is interesting for customers who want to keep their old telephone system and add new functionalities by adding a new PBX in front of the old one. With the bypass scenario you have the opportunity to add a new PBX between the PSTN Lines and the outgoing Lines of the old PBX system. In the case of a failover, the PSTN Lines will transparently reconnected to the existing old PBX (see figure).



FEATURES

- PSTN Failover device
- 2 switchable current connections
- 4BRI / 4PRI switchable
- Compatible with any PBX
- Technology independent (Analog, ISDN)
- Failover and Bypass Scenario
- Long-lasting and reliable – no moving parts
- Automated Failover via Watchdog
- Administrable via easy to use Web GUI
- Alarm function: visuel, audio & via Mailg

TECHNICAL SPECIFICATIONS

- 4 x 4RJ45 Ports to switch to 4 BRI, 4 PRI, 4 FXO or 4 FXS
- All 8 Pins of RJ45 can be switched
- Failover and Bypass Scenario selectable
- Administration via the self-explanatory Webinterface
- Completely controllable via API for custom applications
- Syslog generation in order to monitor devices by individual custom applications
- Onboard Watchdog for automatic switching in case of a Failover
- Onboard E-Mail notification in case of a Failover
- 2 switchable connections for power supply on the backside of the device e.g. for „Remote re-start “
- Compliance: CE (EN55022, EN55024, EN60950)

DIMENSIONS AND WEIGHT

- Dimensions: 440 x 150 x 42 mm
- Weight: approx. 2,3 kg
- Mounting: 1U, 19" rack brackets
- Storage temperature: -20° bis 70°C
- Operating temperature: 0° bis 40°C
- Humidity: up to 90%, non-condensing

Telephony Appliance

Powered by the beroNet Hypervisor



"Our customers have come to rely on the beroNet Appliance's reliability and the flexibility provided by its unique modular design when implementing our software based IP phone system."

Mathias Pasquay, CEO at pascom Netzwerktechnik

OVERVIEW

Designed to last, the beroNet Telephony Appliance is award winning telecommunication hardware designed to run your IP-PBX and telecommunication systems in a single box. Pick from three base models built for small to medium sized businesses.

Overview

Energy efficient appliance for your VoIP and UC needs
Use our energy efficient Telephony Appliance to run your IP-PBX system. Powered by fewer than 25 Watts, the Appliance offers you the opportunity to house your IP-PBX and VoIP Gateway in one device. With no moving parts, the beroNet Telephony Appliance is designed to run 24/7, without interruption.



With no moving parts, it is designed to run 24/7, without interruption

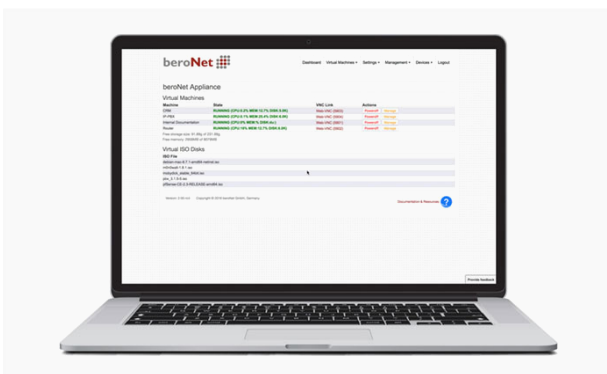


Virtualize your systems and manage them using the cloud

The beroNet Hypervisor, allows multiple operating systems to run on the device at the same time. This creates the opportunity for the beroNet Telephony Appliance to function as the communications hub of an organization, with the ability to hold systems such as an IP-PBX, router and CRM. You can register your device in the beroNet Cloud for remote management and monitoring of your virtual machines.

Integrated VoIP Gateway for ISDN and Analog connections

Choose the device with an integrated VoIP Gateway to meet your complete telephony needs. Add a beroNet VoIP Card to the device and gain all the benefits of beroNet OS and beroNet VoIP Gateway modularity. Choose any of our ISDN, Analog or GSM modules to ensure compatibility with your current provider, connect your IP-PBX to analog devices, or configure an ultimate call failover to GSM.



FEATURES

- Powered by the beroNet Hypervisor
- Compatible with any IP-PBX
- No moving parts
- Cloud managed

TECHNICAL SPECIFICATIONS

- Intel Celeron – Quadcore (N3160) with 1.6 GHz, 2.24 GHz Burst Frequency
- 4GB, 8GB or 16GB RAM
- 60GB, 120GB or 240 GB SSD
- VT-x and VT-x EPT for virtualization
- mSATA
- VGA, HDMI, Four USB 3.0 Ports
- 2 network interfaces (1 GbE)
- 12V power, less than 20W power consumption
- Fanless cooling

Appliance Version VoIP only

WITHOUT INTEGRATED GATEWAY

Model	Description
BNTA21-VO-M	Appliance VoIP only Model „M“ with 4GB RAM, 60GB SSD, Dual NIC
BNTA21-VO-L	Appliance VoIP only Model „L“ with 8GB RAM, 120GB SSD, Dual NIC
BNTA21-VO-XL	Appliance VoIP only Model „XL“ with 16GB RAM, 240GB SSD, Dual NIC

Appliance with Integrated VoIP Gateway

EXPANDABLE WITH ADDON MODULES

Base Models	Description
BNTA21-M	Appliance Model „M“ with 4GB RAM, 60GB SSD, Dual NIC and BF400e
BNTA21-L	Appliance Model „L“ with 8GB RAM, 120GB SSD, Dual NIC and BF1600e
BNTA21-XL	Appliance Model „XL“ with 16GB RAM, 240GB SSD, Dual NIC and BF1600e

ISDN Models	Description
BNTA21-2S02FXS-M	Appliance „M“ with BF400e plus 2 BRI/S0 / 2 FXS Module
BNTA21-2S02FXS-L	Appliance „L“ with BF1600e plus 2 BRI/S0 / 2 FXS Module
BNTA21-2S02FXS-XL	Appliance „XL“ with BF1600e plus 2 BRI/S0 / 2 FXS Module
BNTA21-4S0-M	Appliance „M“ with BF400e plus 4 BRI/S0 Module
BNTA21-4S0-L	Appliance „L“ with BF1600e plus 4 BRI/S0 Module
BNTA21-4S0-XL	Appliance „XL“ with BF1600e plus 4 BRI/S0 Module
BNTA21-1E1-L	Appliance „L“ with BF1600e plus 1 PRI E1 Module
BNTA21-1E1-XL	Appliance „XL“ with BF1600e plus 1 PRI E1 Module

Analog Models	Description
BNTA21-4FXO-M	Appliance „M“ with BF400e plus 4 FXO Module
BNTA21-4FXO-L	Appliance „L“ with BF1600e plus 4 FXO Module
BNTA21-4FXO-XL	Appliance „XL“ with BF1600e plus 4 FXO Module
BNTA21-4FXS-M	Appliance „M“ with BF400e plus 4 FXS Module
BNTA21-4FXS-L	Appliance „L“ with BF1600e plus 4 FXS Module
BNTA21-4FXS-XL	Appliance „XL“ with BF1600e plus 4 FXS Module

GSM Models	Description
BNTA21-2GSM-M	Appliance „M“ with BF400e plus 2 GSM Module
BNTA21-2GSM-L	Appliance „L“ with BF1600e plus 2 GSM Module
BNTA21-2GSM-XL	Appliance „XL“ with BF1600e plus 2 GSM Module



When an office loses connection with an off-site telephone system, local telephones are unable to communicate with each other or the outside world. beroNet's SBA-App transforms a beroNet VoIP device into a Survival Branch Appliance, enabling the beroNet device to function as a local backup telephone system.



With the SBA-App installed, local phones will continue to function when:

- the main telephone system fails
- the VPN/Internet connection to the main office is lost
- the Internet connection to the hosted PBX is lost

In these situations, local phones are registered directly with the beroNet device, allowing them to continue communicating with each other and the outside world.

Users, call groups and SIP trunks are easily configured using a CSV file. The structure of the CSV file is very simple, allowing it to be created and edited using a spreadsheet program such as Microsoft Excel. Alternatively, users can be exported from the main system as a CSV file and then imported into the SBA-App. This import can be done using the interface of the App.

TECHNICAL SPECIFICATIONS

- Users can call each other
- Hold / Transferring Calls
- Outgoing calls using SIP trunks or Gateway ports
- Installation of call groups

BERONET APPS

beroNet CAPI



Overview

beroNet CAPI (BNCAPIS_OHO, BNCAPIS_Business, BNCAPIS_extraChannel) is a simple and powerful Software Solution, which enables you to connect your beroNet VoIP devices with the existing CAPI applications.

Virtualize your applications

With the help of the beroNet CAPI you will finally be able to virtualize your applications in order to decouple them from ISDN connections.

beroNet CAPI and the beroNet CAPI FSC will be available as a software download and are licensed per channel (between 2-60 channels) and per beroNet device.

Connect your beroNet VoIP SBC's, Gateways and PCI(e) cards with the existing CAPI applications.



TECHNICAL SPECIFICATIONS

- Call control: SIP / RTP (standalone unicast)
- Call Deflection
- Caller, called, connected, redirection ID's and names
- Calling line identification restriction
- Overlap Signalling
- User-User Signalling
- DTMF: Inband (RTP-NTE rfc2833), Outband (SIP-INFO)
- Audio: G.711 (A-Law, u-Law) , G.729 (optional)

beroNet Accessories



Model Name	Image	Description
BF19BracketDBL		19" bracket for 2 beroNet Gateways on 1U for the installation in server racks. The package contains: 2 parts for the outside as well as one middle piece for the connection of the 2 Gateways.
BFTAAdapter		The RJ45 to TAE cable connects RJ45 (male) to TAE (female). It can be used with all beroNet VoIP Gateways with analog modules (especially for Germany).
BFFXXCable		The RJ45 zu RJ11 cable allows the utilisation of all analog Modules used in the beroNet Gateways.
BFANTL		GSM antenna with magnetic foot (27cm long) developed for beroNet VoIP Gateways and the BF2GSM Module. It comes with a 3m long cable and empowers a frictionless GSM reception.
BFBridge		beroNet Bridge (BFBridge) is used to access all 4 PSTN Ports over the external 4 RJ45 Ports of the berofix Baseboard.
BNTA19Bracket		19" Rack Bracket created specifically for the beroNet Telephony Appliance
BF19Bracket		The 19" brackets made from high quality aluminum have been created specifically for beroNet VoIP Gateways.
BFE1Cross		The beroNet E1 Cross-Over Cable (BFE1Cross) is a about 1.8m E1/T1 "cross-over" cable. The Cable uses the 1,2,4,5 Pinout.
BFPCM		PCM cable to interconnect beroNet Gateways; enabling hardware bridging across devices
BFANTS		Small 11 cm GSM antenna (BFANTS) for beroNet BF2GSM Modules. It allows the reception of a GSM signal.
BFTAdapter		The beroNet T-Adapter divides the external RJ45 Ports of the berofix Baseboard into 2 RJ45 Ports indicated by "A" and "B". In order to use a berofix with 8 BRI Ports you need 4 beroNet T-Adapters.
BFPower		12 V Powersupply for beroNet Gateways and beroNet SBCs

beroNet Cloud

Device Management Software as a Service



"With the beroNet Cloud I can remote manage all the Gateways of my clients and don't need to worry for my own administration system. This solution saves us time and gives my clients the secure feeling, that we can react fast in case of an outfall of the PBX System."

T. Richter of Netzwerkservice

OVERVIEW

The beroNet Cloud allows to easy manage, update and configure all registered beroNet devices from any web browser. The devices communicate from inside the firewall with the cloud, without compromising security, since no signal from the outside reaches the inside. Update, Remote Manage beroNet devices in multiple locations simultaneously, manage projects and many more. Easy, handy, safe.

Cloud advantages



Intuitional Web GUI:
Easy operation of the Cloud
from any Web Browser



Location Management:
Management of multiple devices
from one central location



Updates & Configuration:
Configuration & Updating of all
devices at once in the field



Absolute Security:
Gateway sends from the inside
through the Firewall current status
to the Cloud

REMOTE MANAGEMENT OF

FUNCTIONS

- beroNet VoIP devices
- Clients
- Projects
- Remote Monitoring of several devices in the field simultaneously
- Task Management with a timeplanner (e.g. automatic Updates)
- Dashboard with Status of all devices in the field
- Notification in case of breakdown
- Backup and Restoring of the configuration

- Devices send every Min. Https Pings to the beroNet Cloud, no NAT necessary
- Tasks are requested and performed
- Overall situation of the devices
- Connection and status changes
- CRC Error Counter
- SIP and GSM Registration
- Firmware Update
- Saving & restoring of Configurations
- Activation & reboot
- App Installation



The world's first SaaS based Cloud solution for VoIP technologies

With the beroNet Cloud all beroNet devices in the field can be safely managed, updated and configured. Thanks to the Remote Monitoring a high efficiency and cost savings can be achieved. Many cases can be resolved via Remote Monitoring.

Easy handling with the beroNet Cloud

With the easy to use Web GUI of the beroNet Cloud, beroNet VoIP SBCs, Gateways, Appliances and PCI(e) Cards can be easy and safe administrated.



Improving communication standards with quality products and services.

Support Services	Description
Free Support	✓ Support via the beroNet Support Desk. ✓ Basic assistance for your beroNet VoIP Hardware ✓ Response within 48 hours on business days
On-Demand Support	✓ 1 hour dedicated, planned support ✓ Next free slot (2 weeks maximum) ✓ Basic help with 3rd party technology and applications
On-Site Support	✓ Full day dedicated on-site support ✓ Written report on what our support team did ✓ Help with 3rd party technology and applications

Consulting Services	Description
VoIP Expert Remote Consulting	✓ Senior VoIP expert consultant ✓ Review of request and research of a solution ✓ Documentation of proposed solution ✓ Phone Conference / Webmeeting with discussion ✓ Meeting notes ✓ Connect with beroNet Partner to integrate proposed solution
VoIP Expert On-Site Consulting	✓ Senior VoIP expert consultant ✓ Local workshop to create solution ✓ Meeting notes ✓ Connect with beroNet Partner to integrate proposed solution

Development Services	Description
Custom beroNet OS	Modify the beroNet OS with a custom feature to connect the Gateway with unique devices
App Development	Have beroNet develop a custom app for your VoIP installations
Development Maintenance	Maintain your customization by porting it to the latest stable firmware one time per year

Extended Warranty	Description
Warranty Extension	Extend your beroNet product warranty to 5 years.



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