beroNet

Cloud managed & monitored
VoIP Gateways and Appliances

The VoIP Experts

beroNet: Europe's leading manufacturer of VoIP Access Technologies

Made in Germany




GSM


PRI


FXS


FXO


BRI


2 BRI / 2 FXS

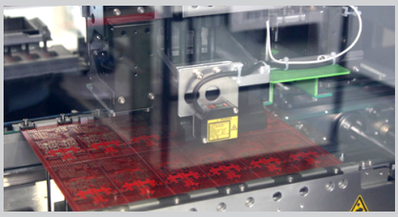


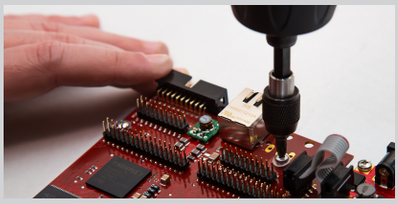
Overview

beroNet is Europe's leading manufacturer of ISDN, analog, hybrid and GSM VoIP access technologies. The worldwide first cloud managed beroNet Gateways and Appliances can be easily administrated and are remote controlled via cloud. beroNet Gateways are compatible with Unify as well as common PBX systems like 3CX, Asterisk, Askozia and many more. All beroNet Gateways and Appliances are designed and assembled in Germany.

6 good reasons for beroNet

1. **Long year Expert Know how**
   12 years of experience in VoIP, Telecoms and Open Source
2. **VoIP Gateways "Made in Germany"**
   Developed and manufactured in Germany
3. **Remote Managed VoIP Gateways and PCI(e) Cards via Cloud**
   Easy and safe Cloud Management, Remote Management and Configuration
4. **High Compatibility with common PBX providers**
   3CX, Askozia, Asterisk, elastix, Unify, Mitel, Lync and many more
5. **Manufacturer Support**
   Free Manufacturer Support for certified beroNet Partners
6. **Modular Design for absolute Flexibility**
   Up to 2 Modules applicable: BRI/PRI, FXS, FXO, ISDN, Analog, GSM







> beroNet is an important partner of 3CX. Their engineering excellence has been proven in many joint deployments where 3CX and beroNet were able to deliver a cutting edge and reliable PBX solution for customers world wide.

3CX Nick Galea, CEO of 3CX

Compatible with

3CX Asterisk Microsoft Lync Askozia snom elastix IPTAM opensips FreeSWITCH phonalisa m2m pascom

You have questions about VoIP systems? We are glad to help! FON: +49 30 25 93 89-0 Mail: sales@beronet.com

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OPTIONAL

M Version	L Version
✓ 30 GB SSD	✓ 120 GB SSD
✓ 2 GB RAM	✓ 4 GB RAM
✓ 1 Network Card	✓ 2 Network Card

Telephony Appliance

+ Complete IPBX Solution

The beroNet Telephony Appliance is a complete hybrid IPBX solution with integrated beroNet Gateway. A Demo-PBX can easily be installed via USB Bootstick. The Appliance is modular and can be equipped with up to two modules: ISDN (BRI/PRI), analog (FXS/FXO) as well as GSM and can be thus adapted to different requirements. It is also available as business version with a larger hard disk, larger RAM and a second network interface or as VoIP Only Version.

Available Modules:						
 1 PRI Module	 4 BRI Module	 2 BRI / 2 FXS Module	 4 FXO Module	 4 FXS Module	 2 GSM Module	 VoIP Only
Ideal for:						
» ISDN hybrid PBX	» ISDN hybrid PBX	» ISDN hybrid PBX	» Analog hybrid PBX	» Operation of analog devices	» GSM hybrid PBX » SMS Transmission	» IPBX Appliance



Appliance Bootstick

+ Most recent PBX Versions

The beroNet Appliance Bootstick enables a quick and easy installation of various demo PBX systems (like 3CX, Asterisk and many more) onto the beroNet Telephony Appliance. As soon as you connect the Bootstick to the Appliance a web server starts that allows you to download a PBX Image List from the Cloud which can be administrated via an intuitive Web GUI. The needed Image can than be comfortably downloaded and installed. The Bootstick provides always the latest versions of all PBX systems for download.

Features (for the M and L Version of the Appliance):



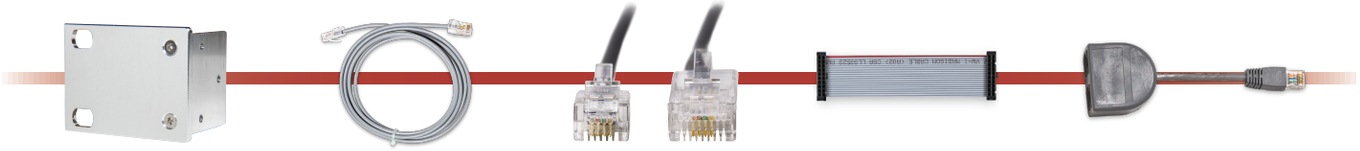
PBX Systems:

3CX Askozia Asterisk elastix IPTAM pascom Vodia

- » DHCP
- » UPnP Support (Windows Network Environment)
- » Installation via Web GUI and Console
- » Always current images available from the cloud
- » Safe or restore your Appliance Installation

> The consequent energy saving design of the Appliance as well as the fanless operation opens up a wide range of possible applications, from the data center to the office environment.
>
> Karsten Wemheuer, CEO of IPTAM

Accessories



19“ Brackets | Cross-Over Cable | E1 Cross over Cable | PCM Cable | BFT Adapter

Made in Germany

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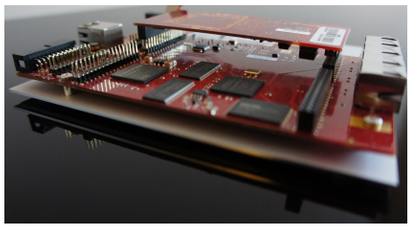


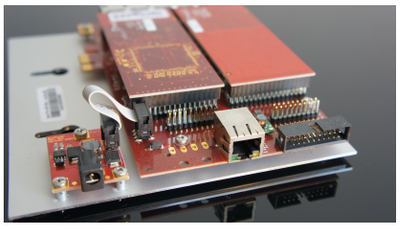
Modular VoIP Gateways

+ Easy expandable

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 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.







Available Modules:						
 1 PRI Module	 2 PRI Module	 4 BRI Module	 2 BRI / 2 FXS Module	 4 FXO Module	 4 FXS Module	 2 GSM Module
Ideal for:						
» SIP Trunking » ISDN connection	» Soft Migration	» Soft Migration » ISDN connection	» Allround Solution	» PSTN connections » Failover Solution	» Analog devices » Top Quality Fax Over IP	» GSM connection » Failover & LCR » SMS transmission



Small Business Line

+ Ideal for SME

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





Available Options:						
ISDN			Analog			
1 BRI	2 BRI	2 BRI / 2 FXS	4 FXS	2 FXO	4 FXO	4 FXO / 4 FXS
Ideal for:						
» ISDN connections » CAPI-option	» ISDN connections » CAPI-option	» ISDN connections » Analog devices	» Analog devices » Top Quality Fax Over IP	» PSTN connections » Failover Solution	» PSTN connections » Failover Solution	» PSTN connections » Analog devices

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» Compatible with any PBX System
» Compatible with common VoIP Providers
» Continued operation of analog devices (Telephone and Fax devices)

16 FXS Gateway

+ Analog Fax/Phone

The beroNet 16 FXS Analog Gateway has been designed to allow an easy integration of older telephone systems into IP infrastructures. It can connect up to 16 analog devices (Telephone or Fax) to an IPBX.

Available Options:	
16 FXS VoIP Gateway	16 FXS Fax VoIP Gateway
Ideal for:	
» up to 16 analog devices (4 Fax devices T.38)	» up to 16 analog Fax devices (T.38)

> 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 Yapalak, IT Department Zehnder GmbH



GSM Gateway

+ Easy SMS Transmission

The beroNet GSM Gateway connects SIP to GSM and supports voice and SMS messaging. It includes an SMS interface as an API, an Outlook Plugin and is the ideal solution for Least Cost Routing. With an additional ISDN module, landline calls, mobile network calls as well as calls to VoIP providers can be made.

Available Options:						
 1 PRI Module	 2 PRI Module	 4 BRI Module	 2 BRI / 2 FXS Module	 4 FXO Module	 4 FXS Module	 2 GSM Module
Ideal for:						
» SIP Trunking » ISDN connection » GSM Failover	» Soft Migration » GSM Failover	» Soft Migration » ISDN connection » GSM Failover	» Allround solution » Mobile PBX	» PSTN connections » LCR » GSM Failover	» Analog devices » Mobile PBX	» GSM connection » Failover & LCR » SMS Transmission

> No other Gateway is integrated faster and easier.

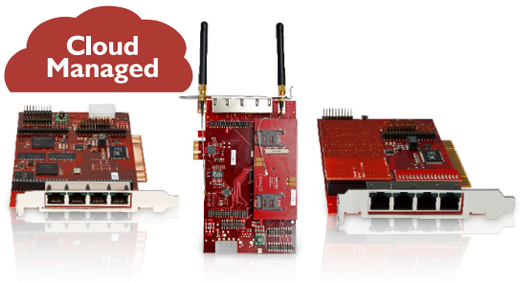
Niels Hansen, Systems Engineer, Dierck Kommunikationstechnik Handels GmbH

Accessories



19“ Brackets | Cross-Over Cable | GSM Antenna (long) | PCM Cable | BFT Adapter

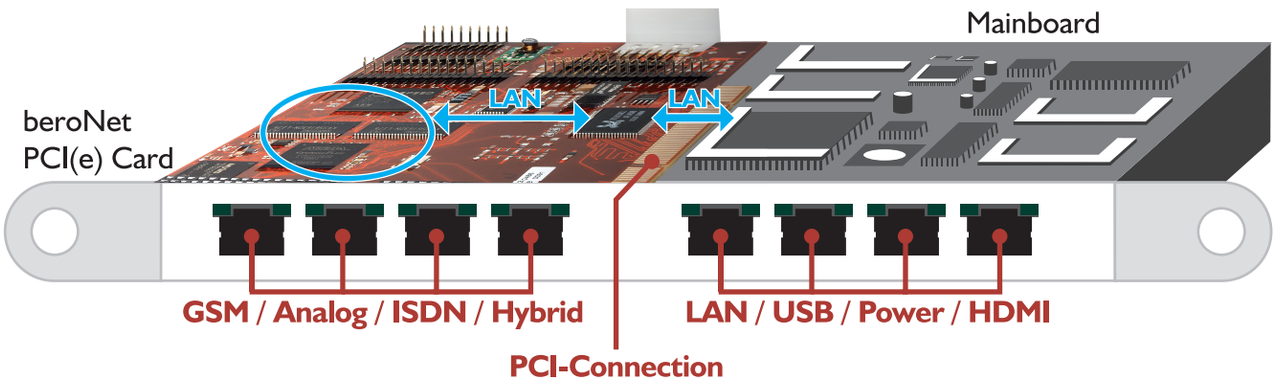
Made in Germany



PCI, PCI(e) Cards

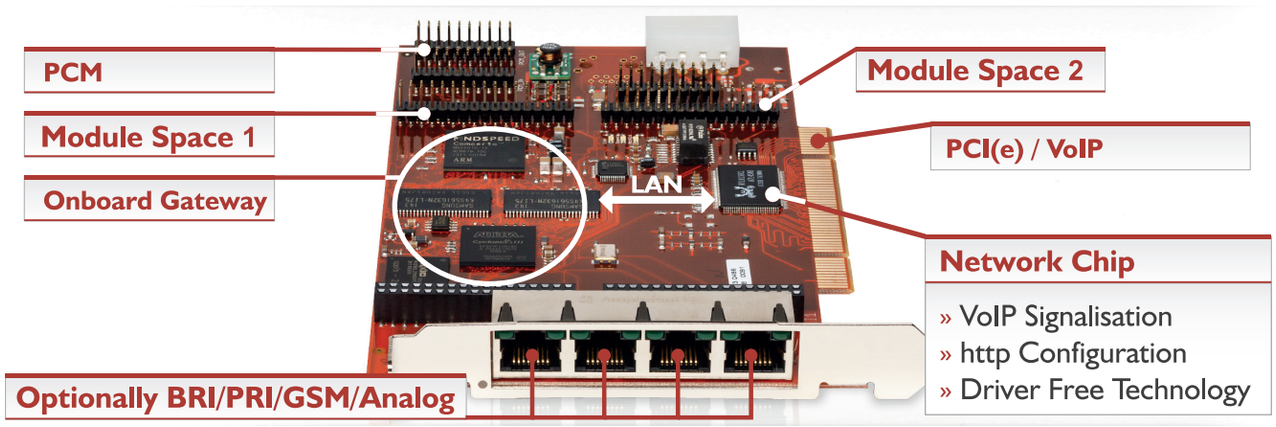
+ Tough & expandable

The beroNet PCI(e) Gateway cards are full-fledged VoIP Media Gateways in the form factors PCI and PCI Express and can be equipped with up to two modules. The cards are ideal for manufacturers of telephone systems, Telephony Appliances, Fax Appliances, Unified Communication Appliances as well as hybrid systems. Due to their driver free conception, they are the preferred Solutions of OEM Partners.



Expandable with the following modules:

Module	Technology
2S02FXS	2x ISDN BRI, 2x Analog (FXS)
4S0	4x ISDN BRI
1E1	1x ISDN PRI
2E1	2x ISDN PRI
4FXO	4x ANALOG (FXO)
4FXS	4x ANALOG (FXS)
8FXS	8x ANALOG (FXS)
2GSM	2x GSM



”The most important factor while developing the new Askozia Appliance was the uncompromising quality of all components. Only the beroNet PCI Cards could meet this high requirements.

Sebastian Kaiser, CEO of Askozia

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IP Controlled via IP

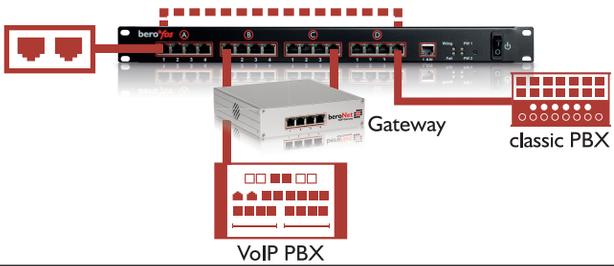
Failover Switch

Failover & Bypass Scenario

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.

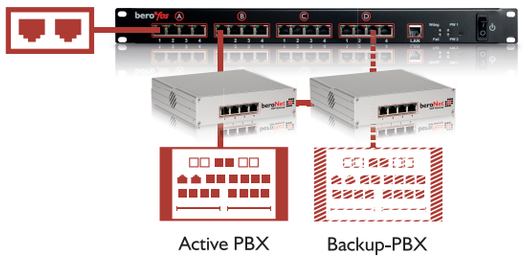
Possible Scenarios:

Bypass Scenario

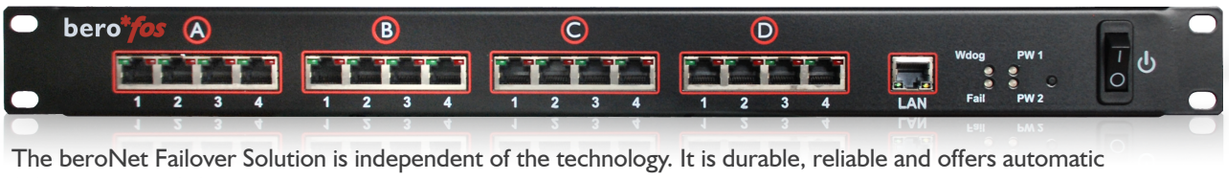


- » Junction of a new telephony system between the exchange ports of the existing telephony system
- » Transparent switching of the exchange port to the existing telephony system
- » Classic PBX is again connected directly to the exchange port

Failover Scenario



- » Grants the smooth and reliable operation of two PBXs side by side
- » Activation of the first system only in case of failure of the second
- » Ideal for maintenance work or Upgrades



The beroNet Failover Solution is independent of the technology. It is durable, reliable and offers automatic failover via watchdog.



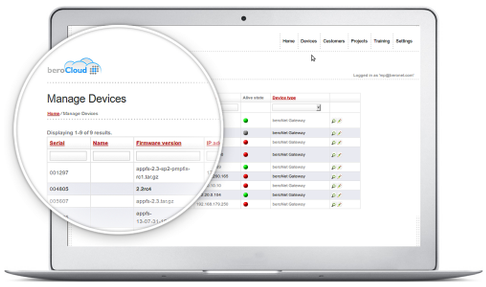
With the intuitive interface of the FOS, switching into failover mode can also be done from a distance (remote switching).



With the 2 power connectors on the back of the FOS up to 2 devices can be connected to the power supply of the FOS. Thus, the Gateways can be easy manually activated or deactivated.

> 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

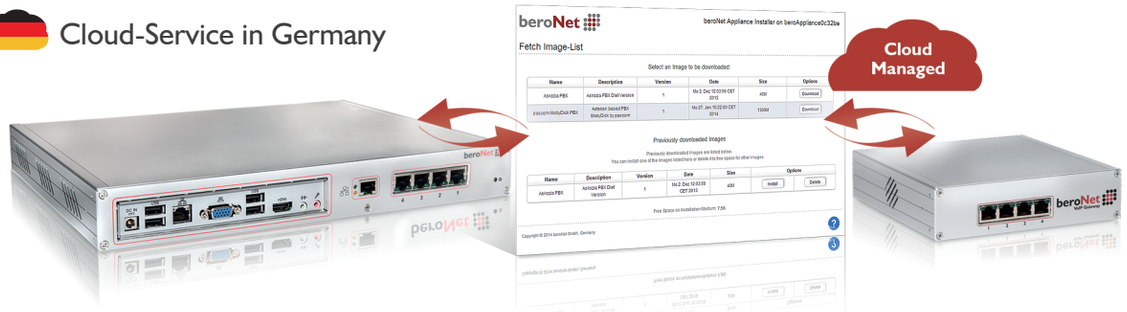


beroNet Cloud

Secure Remote Maintenance

With the beroNet Cloud Solution Providers and Carriers can easy administrate their beroNet Gateways and PCI(e) cards in the field with any Web browser. The devices communicate with the Cloud, without compromising security, since no signal from the public Internet enters the LAN.

Cloud-Service in Germany



Advantages:

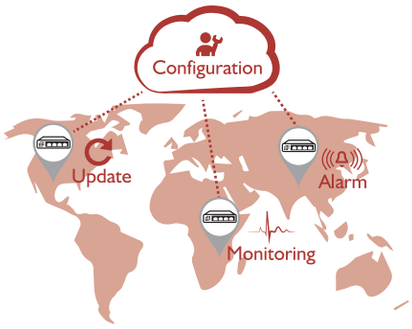
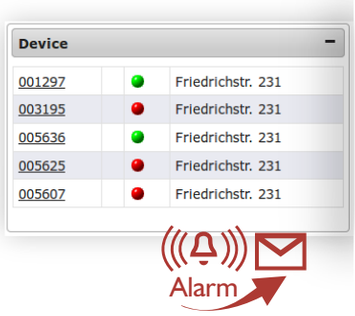
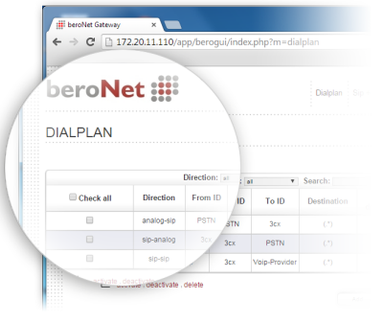
Intuitive Web GUI:
✓ Easy operation of the Cloud from any Web browser

Location Management:
✓ Management of multiple Gateways from one central location

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

Absolute security:
✓ Gateway sends from the inside through the firewall current status to the Cloud

Overview of the most important Features:

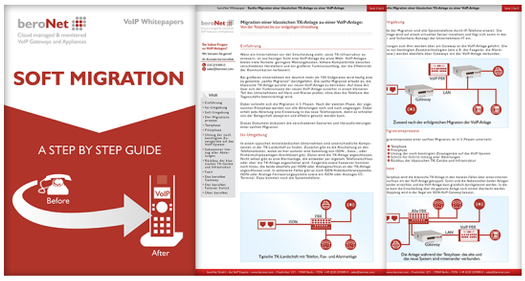
Remote Management	Notifications	Easy Configuration
		
» Remote monitoring, updating and configuration of Gateways at multiple locations via Cloud from the main office	» Automatic E-Mail notification in case of failure	» With the easy to use Web GUI of the beroNet Cloud all devices can be configured easy and safe

”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, Integrator at Netzwerkservice

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Whitepaper Soft Migration

Download For Free

If a company is faced with the decision to renew its PBX-infrastructure, from today's perspective a VoIP System is the first choice. The Soft Migration allows to use the classic PBX in parallel with the VoIP PBX. The free Whitepaper discusses the different scenarios and challenges of a Soft Migration.

What you will learn in the Whitepaper:	
✓ The ideal cycle of the migration process	✓ How the pilot phase is conducted optimally
✓ Considerations during the testing phase	✓ Hints how to avoid common problems

Download for free

www.beronet.com/softmigration-whitepaper



Whitepaper ALL-IP-Transformation

Download For Free

What kind of consequences result in the fact, that ISDN networks will be replaced step by step with All IP networks, especially for owners of classic PBX Systems? This could mean in the worst case, that calls via ISDN are not possible anymore. The free Whitepaper discusses possible challenges and solutions.

What you will learn in the Whitepaper:	
✓ Introduction into the topic of ALL-IP	✓ Propositions for an appropriate strategy of action
✓ Possible pitfalls during a ALL-IP-Transformation	✓ Hints how to avoid common problems

Download for free

www.beronet.com/allip-whitepaper

> By placing the beroNet Gateway in front of our proprietary PBX we were able to initiate a soft migration to our new VoIP PBX. beroNet Gateway proved itself as a robust, carrier grade system from day one, handling up to 5000 calls per day (internal, incoming and outgoing) while the unbeatable price of the beroNet Failover solution was the closing argument.

Ercan Yapalak, Zehnder GmbH IT Department

beroNet

Gateways

Digital

	Product Name	BFSB1S0	BFSB2S0	BF4004S0Box	BF4002S02FXSBox	BF16001E1Box	BF64002E1Box
Features	Interfaces	1x BRI ISDN	2x BRI ISDN	4x BRI ISDN	2x BRI ISDN / 2xAnalog FXS	1x PRI ISDN	2x PRI ISDN
	Protocols	Q921, Q931	Q921, Q931	Q921, Q931	Q921, Q931	Q921, Q931	Q921, Q931
	PTP / PMP	✓/ ✓	✓/ ✓	✓/ ✓	✓/ ✓	✓/ –	✓/ –
	NT / TE	✓	✓	✓	✓	✓	✓
	ISDN Features	UUS, AOC-D	UUS, AOC-D	UUS, AOC-D	UUS, AOC-D	UUS, AOC-D	UUS, AOC-D
	ISDN Features	MCID, CD	MCID, CD	MCID, CD	MCID, CD	MCID, CD	MCID, CD
	CLIR	✓	✓	✓	✓	✓	✓
	CLIP	✓	✓	✓	✓	✓	✓
	CAPI	optional	optional	optional	optional	optional	optional
	Windows Fax	optional	optional	optional	optional	optional	optional
	SIP	RFC3261	RFC3262	RFC3263	RFC3264	RFC3265	RFC3266
	TLS	✓	✓	✓	✓	✓	✓
	SRTP	✓	✓	✓	✓	✓	✓
	G729 Channels	4	4	4	4	16	64
	T38 Channels	4	4	4	4	16	32
	G168 channels	16	16	16	16	64	128
	Clearchannel	✓	✓	✓	✓	✓	✓
	Module Support	–	–	✓*	✓	✓	✓
	PCM	✓	✓	✓	✓	✓	✓
	19“	–	–	✓	✓	✓	✓

*Also available as a non-modular version (Small Business Line)

Telephony Appliances

Digital

	Product Name	BNTA_2S02FXS	BNTA_4S0	BNTA_1E1
Features	Interfaces	2x BRI ISDN / 2xAnalog FXS	4x BRI ISDN	1x PRI ISDN
	Protocols	Q921, Q931	Q921, Q931	Q921, Q931
	PTP / PMP	✓/ ✓	✓/ ✓	✓/ –
	NT / TE	✓/ ✓	✓/ ✓	✓/ ✓
	ISDN Features	UUS, AOC-D	UUS, AOC-D	UUS, AOC-D
	ISDN Features	MCID, CD	MCID, CD	MCID, CD
	CLIR	✓	✓	✓
	CLIP	✓	✓	✓
	CAPI	optional	optional	optional
	Windows Fax	optional	optional	optional
	SIP	RFC3264	RFC3263	RFC3265
	TLS	✓	✓	✓
	SRTP	✓	✓	✓
	G729 Channels	4	4	16
	T38 Channels	4	4	16
	G168 channels	16	16	64
	Clearchannel	✓	✓	✓
	Module Support	✓	✓	✓
	PCM	✓	✓	✓
	19“	✓	✓	✓
	Processor	Atom 2-Core 1.8Ghz	Atom 2-Core 1.8Ghz	Atom 2-Core 1.8Ghz
	NIC	M-Version: 1 / L-Version 2	M-Version: 1 / L-Version 2	M-Version: 1 / L-Version 2
	SSD	M-Version: 30GB / L-Version: 120 GB	M-Version: 30GB / L-Version: 120 GB	M-Version: 30GB / L-Version: 120 GB
	Memory	M-Version: 2GB / L-Version: 4GB	M-Version: 2GB / L-Version: 4GB	M-Version: 2GB / L-Version: 4GB

Analog

		BNTA_4FXO	BNTA_4FXS
Features	Interfaces	4xAnalog FXO	4xAnalog FXS
	CLIP	detection	✓
	CNIP	detection	✓
	Flashhook	detection	–
	MWI	–	✓
	Hold	–	✓
	Retrieve	–	✓
	Transfer	–	✓
	CAPI	✓	–
	Windows Fax	✓	–
	SIP	RFC3266	RFC3266
	TLS	✓	✓
	SRTP	✓	✓
	G729 Channels	4	4
	T38 Channels	4	4
	G168 Channels	16	16
	Clearchannel	✓	✓
	Module Support	✓	✓
	PCM	✓	✓
	19“	✓	✓
	Processor	Atom 2-Core 1.8Ghz	Atom 2-Core 1.8Ghz
	NIC	M-Version: 1 / L-Version 2	M-Version: 1 / L-Version 2
	SSD	M-Version: 30GB / L-Version: 120 GB	M-Version: 30GB / L-Version: 120 GB
	Memory	M-Version: 2GB / L-Version: 4GB	M-Version: 2GB / L-Version: 4GB

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Gateways

Analog

Features	Product Name	BF4004FXOBox	BF4004FXSBox	BN16FXS
	Interfaces	4xAnalog FXO	4xAnalog FXS	16x Analog FXS
	CLIP	detection	✓	✓
	CNIP	detection	✓	✓
	Flashhook	detection	–	–
	MWI	–	✓	✓
	Hold	–	✓	✓
	Retrieve	–	✓	✓
	Transfer	–	✓	✓
	CAPI	✓	–	–
	Windows Fax	✓	–	–
	SIP	RFC3266	RFC3266	RFC3266
	TLS	✓	✓	✓
	SRTP	✓	✓	✓
	G729 Channels	4	4	4
	T38 Channels	4	4	4
	G168 Channels	16	16	16
	Clearchannel	✓	✓	✓
	Module Support	✓*	✓*	–
	PCM	✓	✓	✓
	19"	✓	✓	✓

GSM

Features	Product Name	BF4002GSMBox	BF4004GSMBox
	Interfaces	2x GSM	4x GSM
	Frequencies	Quadband	Quadband
	Protocol	3GPP Release4	3GPP Release4
	SIM Slots	2	4
	CLIP	✓	✓
	CLIR	✓	✓
	SMS	Text/PDU	Text/PDU
	SMS-API	REST based	REST based
	CAPI	–	–
	Windows Fax	–	–
	SIP	✓	✓
	TLS	✓	✓
	SRTP	4	4
	G729 Channels	4	4
	T38 Channels	16	16
	G168 Channels	✓	✓
	Clearchannel	✓	✓
	Module Support	✓	–
	PCM	–	–
	19"	✓	✓

Telephony Appliances

GSM

Features	Product Name	BNTA_2GSM	BNTA_4GSM
	Interfaces	2x GSM	4x GSM
	Frequencies	Quadband	Quadband
	Protocol	3GPP Release4	3GPP Release4
	SIM Slots	2	4
	CLIP	✓	✓
	CLIR	✓	✓
	SMS	Text/PDU	Text/PDU
	SMS-API	REST based	REST based
	CAPI	–	–
	Windows Fax	–	–
	SIP	✓	✓
	TLS	✓	✓
	SRTP	4	4
	G729 Channels	4	4
	T38 Channels	16	16
	G168 Channels	✓	✓
	Clearchannel	✓	✓
	Module Support	✓	–
	PCM	–	–
	19"	✓	✓
	Processor	Atom 2-Core 1.8Ghz	Atom 2-Core 1.8Ghz
	NIC	M-Version: 1 / L-Version 2	M-Version: 1 / L-Version 2
	SSD	M-Version: 30GB / L-Version: 120 GB	M-Version: 30GB / L-Version: 120 GB
	Memory	M-Version: 2GB / L-Version: 4GB	M-Version: 2GB / L-Version: 4GB

VoIP Only

BNTAVO

Features		
	Processor	Atom 2-Core 1.8Ghz
	NIC	2
	SSD	120GB
	Memory	4GB
	19"	✓
	USB 2.0 Ports	4

beroNet Appliance Bootstick



Features		
	Memory	8GB
	Connection	USB 2.0
	PBX Systems	3CX, Askozia, Asterisk, elastix, IPTAM, pascom, Vodia
	Operation System	Linux, Windows 7 & 8
	Configuration	WebGUI & Console
	Functions	» DHCP » UPnP » Save images on the Stick » Backup & Recovery of the Installation

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Cloud managed & monitored
VoIP Gateways und Appliances

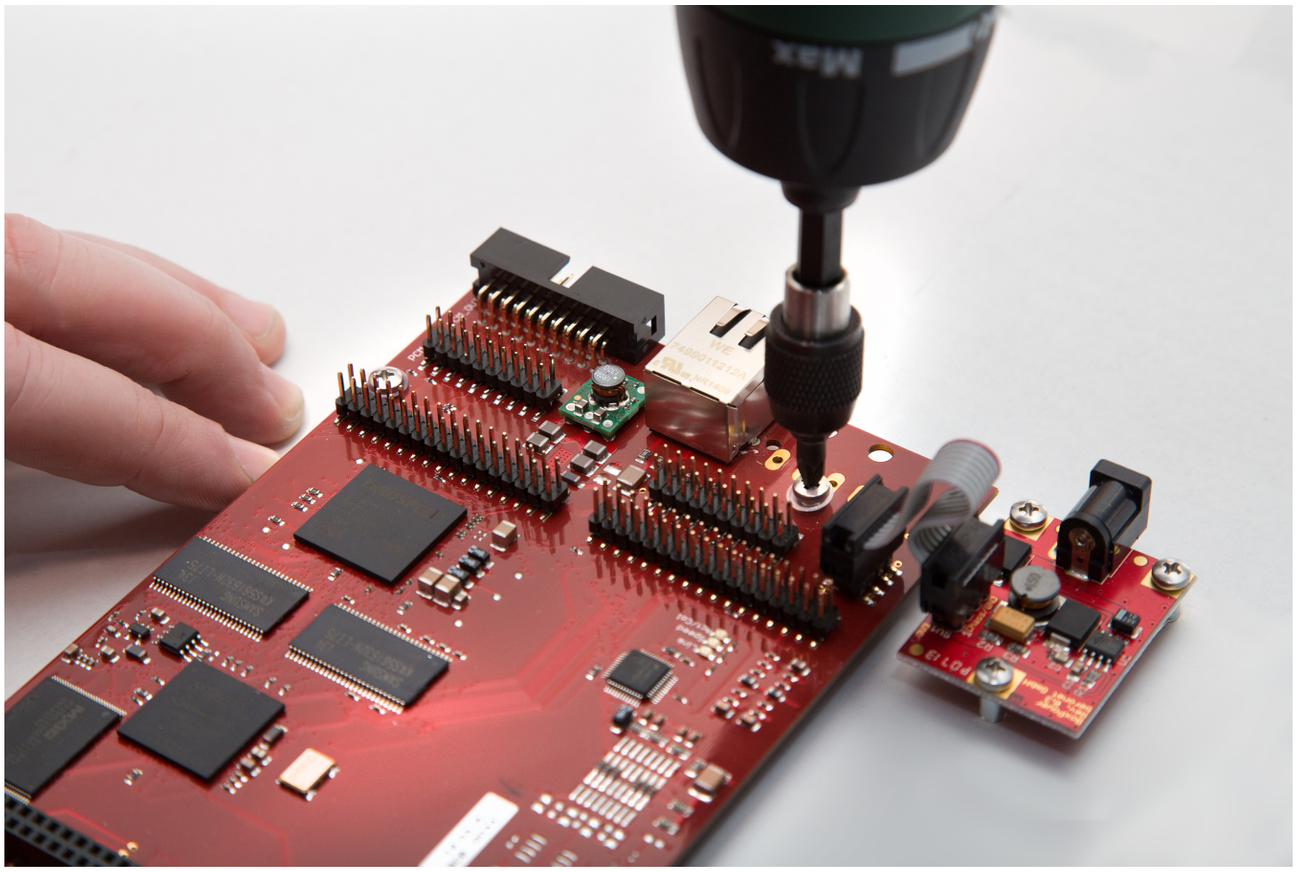
beroNet advantages at a glance

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- **For free: Cloud Management**
  Remote manage all beroNet devices easy and safe in the beroNet Cloud
- **5 Minute Installation**
  Fast and easy installation of all beroNet devices
- **Modular: BRI, PRI, Analog, GSM**
  Ideal for a wide variety of customer requirements
- **Highly compatible**
  Compatible with 3CX, Askozia, Asterisk

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You have questions about VoIP systems? We are glad to help! FON: +49 30 25 93 89-0 Mail: sales@beronet.com

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