

Confidence of Security

Biodata Babylon Modular encryption device for communication lines

Biodata Babylon is a range of high security devices for the encryption of communication lines. Hackers and industrial spies constantly threaten the integrity of complex IT networks in small, medium and large enterprises. In the context of multinational business processes, confidential information is being sent across open networks such as phone lines, unsafe data lines and the Internet.

By translating data into a secret code, encryption products secure the transmission of data packages through public communication wires. Now, network engineers can safely link the internal infrastructure to other LANs or WANs without compromising corporate security policies.

The Innovative Modular System

Biodata Babylon is the only encryption platform with interchangeable interfaces making the system compatible with all environments, such as ISDN, Frame Relay and X.25.

When the network's architecture is changed, the administrator simply needs to exchange the interface card and update the Biodata Babylon firmware to the appropriate protocol, without having to change the encryption main board.

Biodata's modular concept minimizes customer risks by providing full investment protection and low maintenance costs.



Certification

Biodata is currently preparing to certify logistics based on ISO 9002 and the development process based on Common Criteria (ISO/IEC 15408).

- **Modular encryption platform for communication lines of up to 2 Mbps**
- **Hardware-based, approved Triple-DES encryption (192 bit)**
- **Secures ISDN (voice, data, fax, video-conferencing), Serial Links, X.25, Frame Relay, Link-HDLC, Link-Bitstream and mobile satellite connections (Inmarsat)**
- **Operates seamlessly between private and public networks**
- **Modular design for investment protection and cost reduction**
- **Secures teleworking and telemedicine environments**
- **Completely transparent to end-users within the secured environment**
- **Enforces policies as defined by the security system administrator**
- **Remote management using Biodata SecurityManager**



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Encryption

Encryption protects data packages sent over public communication lines. Internationally recognized cryptographic standards like Triple-DES scrambles confidential data into a secret code. To decipher encrypted information you need to have access to a secret key.

Biodata Babylon uses hardware supported symmetric encryption algorithms for encrypting the data stream. Biodata continuously watches the development of new technologies and algorithms in cryptography, the company's strategy being to integrate every standard encryption method. For example, an integration of the new AES algorithm (Rijndael) is planned.

For every new communication session Biodata Babylon devices are able to automatically generate a unique key by means of the Diffie-Hellman public key exchange protocol. You can also define your own set of keys and assign them to the different logical links. Biodata Babylon protects your sensitive data using 192 bit triple-DES encryption.

Biodata Babylon



Biodata Babylon Serial is an encryption device for serial-line-based networks that allows security administrators to flexibly connect computer networks.

Biodata Babylon devices can be integrated seamlessly into your

existing IT infrastructure, thus ensuring a maximum system uptime.

All communication between two Biodata Babylon Serial boxes is encrypted.

The devices cover a variety of serial protocols as Link-HDLC, Frame Relay and X.25. Biodata Babylon Serial performs hardware encryption at network speeds of up to 2 Mbps, offering flexible connectivity with synchronous serial lines.

You can also configure Biodata Babylon Serial to encrypt the complete bitstream protocol indepen-

dently. The protocol options (Link-HDLC, Link-Bitstream, Frame Relay or X.25) can be switched by simply changing the license code because the systems are based on the same hardware.

In-Band Management of Biodata Serial Devices

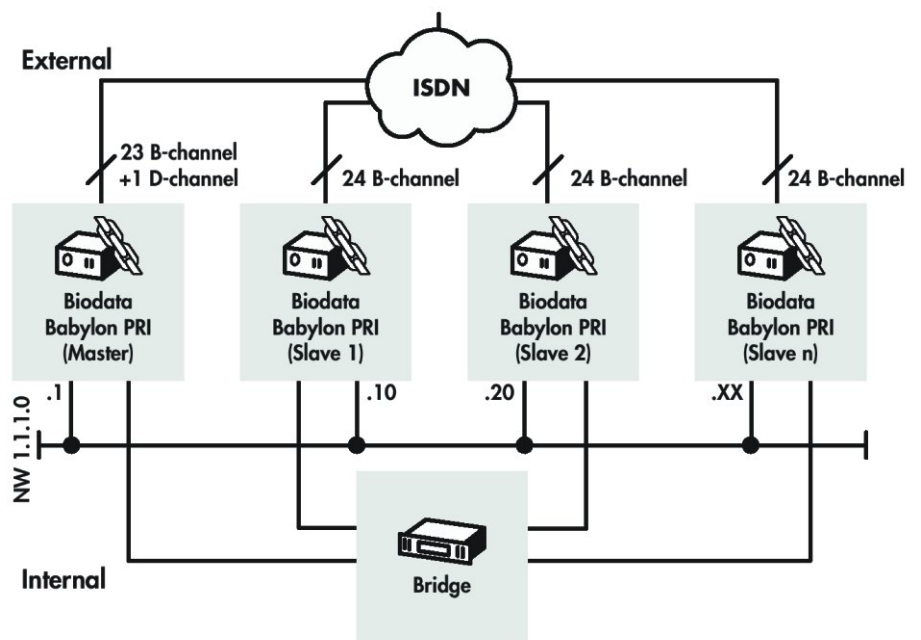
Biodata Babylon Serial is able to manage other Biodata Babylon Serial devices via 'In-band Management' from a remote location. There is no need for a separate infrastructure as you can simply configure other Biodata Babylon Serial via the data interface (X.25 protocol only).

Biodata Babylon PRI



Securing ISDN connections

Biodata Babylon PRI, 4xBRI and Basic are encryption devices for public telephone lines that allow you to protect voice, data, fax and videoconferencing ISDN communications. Biodata Babylon is the global market leader in ISDN encryption today, making its encryption protocol an industry standard.





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Biodata Babylon PRI was developed for the encryption of a Primary Rate Interface (PRI). It can handle up to 30 ISDN lines simultaneously at a maximum network speed of 2Mbps, and is the perfect device for securing the ISDN communication of large corporations.

Biodata Babylon is easy to install: To protect voice, fax and videocon-

ferencing data, Biodata Babylon PRI is placed before the PABX. Now, you can safely link your private equipment, such as a PABX, to the public telephone network without compromising security.

Another feature of Biodata Babylon PRI is the possibility to combine several devices for NFAS environment with N1-protocol (see picture).

Biodata Babylon is compatible with all ISDN-based phone, fax, and data communication as well as videoconferencing systems. Biodata Babylon is the only encryption system worldwide to support both international and Euro ISDN.

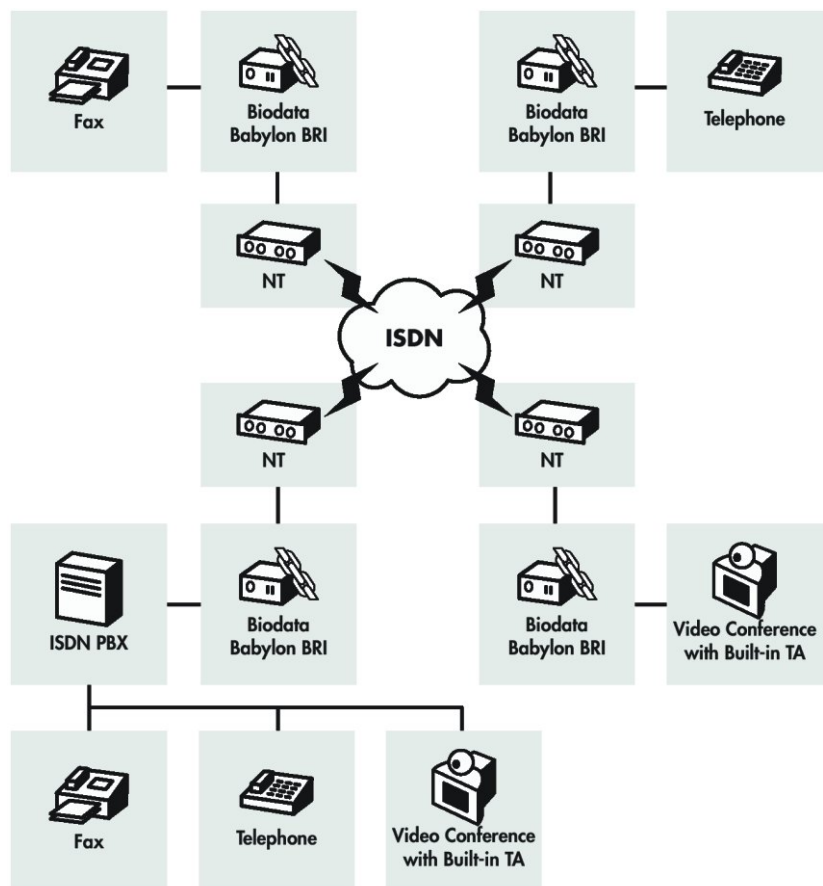
With a special license, the devices can even be used for mobile satellite connections such as Inmarsat.

Biodata Babylon 4xBRI



Biodata Babylon 4xBRI is equipped with four ISDN Basic Rate Interface (BRI) ports. It is therefore especially suited for small offices or one-to-one videoconferences.

Biodata Babylon 4xBRI is simply placed in front of the end user device, such as an ISDN telephone, fax, personal computer or videoconferencing system.



Biodata Babylon Basic



Biodata Babylon Basic is an inexpensive single BRI ISDN encryption device for home offices.

It is the only device in the Biodata Babylon series that is not based on the modular architecture.



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Remote Management with Biodata SecurityManager

With a central management tool, Biodata Babylon ensures customer-friendly configuration. This software application allows authorized administrators to centrally manage encryption keys, install new firmware

and configure devices. Biodata Babylon devices support SNMP and Syslog.

Extensive monitoring capabilities about every connection provide network managers with real-time system status.

Technical Specifications

Standards

- Full line-rate encryption in high-speed networks up to 2Mbps
- Independent encryption key for each logical link

Encryption

- 192 bit TripleDES in ECB, CFB, CBC
- Diffie-Hellman public key management (1024 bit)

Biodata Babylon Serial

- DB25 plug/socket configurable to X.21, V.24 (synchronous) or V.35
- RJ-45 port (10BaseT) for network configuration and management with Biodata SecurityManager
- Supports X.25 SVC and PVC connections
- Link-Bitstream, Link-HDLC connections
- Frame Relay SVC + PVC connections
- RJ-12 port (V.24) for serial connection management

Biodata Babylon Basic

- Protocol-transparent, full-duplex operation
- 1x Basic-rate encryption(N1 or E-DSS1)
- NFAS and H0 call support

More Information

Biodata Systems is one of the leading manufacturers for IT Security with business partners in Europe, Asisa, Africa, Australia and America.

- RJ-45 ports (1 x input/1 x output to connect ISDN devices)
- RJ-12 port (V.24) for serial connection management
- Compliant with N1 and E-DSS1 ITU-T or ANSI ISDN standards e.g. ITU 430, 431, 441, 451, ETS 300 102
- RJ-45 port (10BaseT) for network configuration and management using Biodata SecurityManager

Biodata Babylon 4xBRI

- Protocol-transparent, full-duplex operation
- 1-4x Basic full line-rate encryption
- Data rate from 1 x BRI to 4 x BRI (N1 or E-DSS1)
- Supports leased-line connections 64S and 64S2, S01 and S02
- RJ-45 ports (4 x input / 4 x output) to connect ISDN devices
- RJ-12 port (V.24) for serial connection management
- Compliant with N1 and E-DSS1 ITU-T or ANSI ISDN standards, e.g. ITU 430, 431, 441, 451, ETS 300 102.
- RJ-45 port (10BaseT) for network configuration and management using Biodata SecurityManager
- NFAS and H0 call support

Biodata Babylon PRI

- Protocol-transparent, full-duplex operation
- 1x Primary rate full line-rate encryption (N1 or E-DSS1)
- NFAS and H0 call support
- E1, T1 and J1 interface available
- Leased line connection G.703
- Support of NFAS
- RJ-45 ports (input /output) to connect PRI devices
- RJ-12 port (V.24) for serial connection management
- Compliant with N1 and E-DSS1 ITU-T or ANSI ISDN standards, e.g. ITU 430, 431, 441, 451, ETS 300 102.
- RJ-45 port (10BaseT) for network configuration and management using Biodata SecurityManager

Central Management

- Remote and user-friendly management of all Biodata Babylon devices within a network using the Biodata SecurityManager
- Devices store alarm events in memory with time and date stamps
- Automatic system self test on boot-up
- Monitoring via SNMP and Syslog

Customer Support

- Worldwide sales, services & distribution

www.biodata.com