



# Diamond

Encrypting ISDN phone



## SECURE COMMUNICATION

Diamond is an encrypting ISDN phone and data modem destined to highly demanding business users expecting high level of security. Efficient implementation of elliptic curve cryptography guarantees unparalleled levels of security. Optimal implementation allows us to give you a professional solution for a competitive price. The encrypting functionality is completely independent of the telecommunication provider.

Diamond integrates functionality of three devices in one case: sophisticated ISDN terminal, encrypting phone and open/encrypting data modem.

Diamond operates in open (standard) mode in connection to any other PSTN/ISDN/GSM phone. To connect in secure (encrypting) mode it needs on the opposite side other encrypting device invented by TechLab (PSTN/ISDN/GSM) belonging to SYLAN System. Diamond supports all standard ISDN services and also provides encrypted three party connection which is a worldwide unique feature.

The device is optimized for security. Encrypted call set-up takes up to 1.0s. The voice stream is uncompressed 64 kbps stream, thus its quality is brilliant. There is also no voice delay or any disturbance due to encryption. There is no competitive device with such parameters.

The solution implements built-in cryptography with user friendly, instant graphical interface working in intuitive manner. The user need not to be an expert. All encrypting functionality is easy accessible. Calls register and Contacts allow to easy navigate througha different kinds of entries. Alphanumeric keypad helps to maintain Contacts entries.

Diamond gives you not only security for voice but also for data connections. It implements encrypting ISDN PPP modem with dynamic multilink property. You can call and independently transfer data at one time.

Diamond is a member of a worldwide unique SYLAN System family of encrypting phones. These are devices working interoperably on different kinds of landline and mobile interfaces.

IMPORTANT

ADVANCED CRYPTOGRAPHY

BRILLIANT VOICE QUALITY

DATA SECURITY

FAST OPERATION

USER FRIENDLINESS

INTEROPERABILITY

RELIABILITY

MEMBERS OF SYLAN SYSTEM

PSTN: PLATINUM, GOLD

ISDN: TITANIUM, DIAMOND, FAXA

GSM: KRYPTON, XAOS GAMMA



Phone	
ISDN network	Euro DSSI (I.430, Q.921, Q.931)
ISDN services	UUS-1 (SMS like messages), CLIP/CLIR, 3PTY, AOC, call diversion.
Additional services	Answering machine, MUTE, automatic redial, call register.
Weight with battery	865 g
Dimensions	222 x 85 x 201 mm
Display	LCD 128x64

Configuration	
Local access	GUI or supplied Audit.exe application
Remote access	WWW browser
Access protection	PIN

Contacts	
Contacts entries	Up to 1,000
Fields	Forename, surname, 3 numbers, address, function, email, www.

Encryption	
Encryption algorithm	AES256
Key exchange	Diffie-Hellman scheme over prime modular groups of order 1024..4096 or over elliptic curve NIST P-256 (ansix9p256r1).
Key exchange time (without authentication)	1.0 s for Diffie-Hellman scheme 1536.
Voice transmission delay	10 ms
Data confidentiality	Encrypted firmware. The key is unique for each device.

Data transfer	
Data modem	Multilink PPP
Data rate	Up to 128 kbps
Connection to PC	USB 2.0 FullSpeed

User interface	
Loudspeaking mode	Encrypted and plain connections.
Clock	Real time clock presented on the screen. Accuracy error up to 30 seconds a month.