

TCC

CipherTalk-8000

Secure GSM

Advanced Encryption

AES256 / Twofish

4096 D-H PKE

Hardened  
Operating System



## CipherTalk-8000 Secure GSM SmartPhone & Pocket PC

### Global “End-to-End” Wireless Security

#### Global Secure Communications

The CipherTalk-8000 is designed to provide high-level, end-to-end encrypted mobile communications anywhere in the world. It will operate not just in the cities but virtually all around the globe, providing a secure connection while on the go.

The CipherTalk-8000 radio interface will operate on the North American, Latin American 850 MHz GSM band; the European, Asian, Latin American 900 MHz GSM band; the European, Latin American 1800 MHz GSM band; and the North American, Latin American 1900 MHz GSM band.

#### A Generation Ahead

The CipherTalk-8000 is the *Next Generation Secure GSM Voice Device*. It is designed on the most advanced Pocket PC and SmartPhone convergent device on the market and **TCC's Hardened**, Microsoft's Windows Mobile operating system. A True Pocket PC and Superb SmartPhone equipped with Internet Explorer, GSM Phone, SMS and MMS messages, Landscape View, Outlook Express, Voice Memo, Contacts, Calendar, Word, Excel, Calculator, Photo Album, Photo Contacts, Photo Caller ID, Media Player, Handwriting Recognition, GPRS, Bluetooth, USB Sync Cradle, Large 64K 240x320 pixels transreflective TFT Color Display, Speaker Phone & Mute Microphone, VGA Camera & Camcorder, Built-in Vibration and more.

#### Digital Encryption

The security cornerstone of the CipherTalk-8000 is its encryption algorithm. The CipherTalk-8000 is the only *Global Secure GSM Voice Device* to employ the Advanced Encryption Standard algorithm at 256-bits (AES256), and the Twofish encryption algorithm – both the strongest and most secure algorithms available today. It digitally secures sensitive voice calls by encrypting transmit and receive voice-data, bit-by-bit.

#### Device Security

The CipherTalk-8000 is equipped with a *Security Profile Manager* that modifies the Microsoft's Windows Mobile operating system, “*Hardening*” it against malicious software. The Security Profile Manager provides 3 security levels: MEDIUM, HIGH, and EXTREME to modify the operating system, restricting and disabling applications vulnerable to viruses and intrusion. The EXTREME security level disables all means of communication except the normal unsecured SmartPhone and the CipherTalk-8000 Secure Global Phone while also disabling all permanent memory storage.

#### Flexible Key Management

An important part of any secure system is its key management. The CipherTalk-8000 uses 4,096-bit Diffie-Hellman public key exchange with SHA256 hash function.



TCC's  
CipherTalk-8000

“End-to-End”

“Secure GSM”

# TCC CIPHERTalk-8000

## specifications

security  
for  
mission-critical  
GSM phone  
communications

### Technical Specifications:

#### Operation

Modes	Plain Voice Secure Voice
Frequency	GSM 850/1800/1900 GSM 900/1800/1900
Circuit Switch Data	V.110 or V.32 FAX/MODEM (required)
Standby	190 Hours
Talk Time	2 - 4 Hours

#### Encryption

- ◆ Advanced Encryption Standard (AES265)
- ◆ Twofish

#### Key Management

- ◆ 4,096-bit Diffie-Hellman Public Key Exchange Per Secure Session
- ◆ SHA256 hash

#### Anti-Spoof / Key Verification

- ◆ Via Display Codes

#### Standard Features

- ◆ Phone Book
- ◆ Call Duration Timer
- ◆ Automatic Redial
- ◆ Date and Time Display
- ◆ Mute Microphone
- ◆ Scratch Pad

#### Built-ins

- ◆ *Hardened* Microsoft Windows Mobile Pocket PC Operating System
- ◆ Large Color Display
- ◆ Handwriting Recognition
- ◆ GPRS High Speed Data
- ◆ Speaker Phone
- ◆ Voice Memo
- ◆ 500+ Name Directory
- ◆ SIM card Plug-in (3v)
- ◆ Protocol GSM Phase II, Phase II+
- ◆ Integrated Antenna
- ◆ Internal Camera - Pictures and Video Camcorder
- ◆ Built-in Vibration

#### Operator Provided Services

- ◆ Internet Browsing
- ◆ Call Waiting
- ◆ Call Forwarding
- ◆ Call Holding
- ◆ Caller ID
- ◆ Short Messages
  - ◆ Send
  - ◆ Receive
- ◆ E-mail
- ◆ Voice Mail

#### Physical

Dimensions	108 x 58 x 18 mm
Weight	150 grams
Display	240x320 pixel LCD 64K colors transreflective

#### Environmental

- ◆ Operating Temperature  
0°C to +50°C
- ◆ Relative Humidity  
5% - 95%



#### QUALITY

As an ISO 9001 certified company, TCC designs, manufactures and supports high-grade secure communications systems that protect highly sensitive information transmitted over a wide range of data, voice and fax networks. Over 2,000 government/military agencies, financial institutions, telecom carriers and other multinational corporations worldwide rely on TCC to protect their communications networks.

TCC secures mission critical networks for governments, corporations and financial institutions around the world. With over 40 years of experience, TCC is the trusted supplier for organizations that place a high value on the confidentiality of their data and voice communications.

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