

# CipherTalk-8000

# Advanced Encryption

## Secure Voice Wireless GSM QWERTY PDA

### AES256 4096 D-H PKE

### Hardened Operating System



## CipherTalk-8000 QR Secure Quad-Band GSM QWERTY PDA & Phone

### Worldwide End-to-End (E2E) Voice Encryption

#### Digital Encryption

The CipherTalk-8000 QR provides Strong, End-to-End (E2E) encrypted voice communications with the **Advanced Encryption Standard** algorithm at 256-bits (**AES256**).

In addition, the CipherTalk-8000 QR encryption key algorithm and authentication is achieved through long 4,096-bit **Diffie-Hellman Public Key Exchange** (D-H PKE) and SHA256 hash function readout-hash authentication. Encryption keys are destroyed as soon as the secure call ends

#### Worldwide Coverage

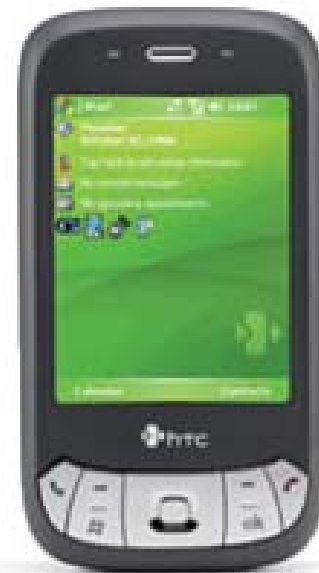
The CipherTalk-8000 QR has a Quad-Band (GSM 850/900/1800/1900 MHz) radio interface that operates on the North American, Latin American 850 MHz GSM band; the European, Asian, Latin American 900 MHz GSM band; the European, Latin American 1800 MHz GSM band; and the North American, Latin American 1900 MHz GSM band.

#### Device Security

The CipherTalk-8000 QR 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 QR Secure Global Phone while also disabling all permanent memory storage.

#### Technology

The CipherTalk-8000 QR is integrated on the HTC's P4350 Quad-band PDA Mobile Communication & Productivity Device. It comes equipped with: Microsoft® Windows Mobile™ 5.0 with Direct Push technology of e-mail, tasks and contacts; Auto-sliding QWERTY keyboard; GPRS/EDGE, Wi-Fi, Bluetooth, USB radio interfaces; Internet Explorer; SMS, LMS and MMS; Voice Dial & Command; Pocket Outlook (Contacts, Calendar, email, Tasks, and Voice Memo); Calculator; Media Player; Large 2.8 TFT Touch Screen LCD Display; Speaker Phone & Mute Microphone; VGA Camera & Camcorder, Built-in Vibration and more.



## Communicate In Confidence

**Technical Specifications:**

**Operation**

Modes	Plain Voice Secure Voice
Frequency	Quad-Band GSM 850/900/1800/1900
Circuit Switch Data (CSD)	V.110 or V.32 Transparent Non-Transparent
Standby	150 – 200 Hours
Talk Time	2 - 5 Hours

**Encryption**

- ◆ **FIPS 140 - 2 Advanced Encryption Standard (AES256)**
- ◆ Twofish256

**Key Management**

- ◆ **FIPS 140 - 2 Long (4,096-bit) Diffie-Hellman Public Key Exchange (D-H PKE) Per Secure Call**
- ◆ **FIPS 140 - 2 SHA256 hash**

**Man-in-the-Middle attacks prevention and Key Verification**

- ◆ Via **FIPS 140 - 2 SHA256 hash Codes**

**Standard Features**

- ◆ Auto-sliding QWERTY keyboard
- ◆ Pocket Office: Word, Excel, Outlook (Contacts, Calendar, email, and Tasks)
- ◆ Internet Explorer
- ◆ Windows Media Player
- ◆ Calculator
- ◆ Call Duration Timer
- ◆ Date and Time Display
- ◆ Mute Microphone
- ◆ Speaker Phone
- ◆ Voice Memo
- ◆ Voice Commands

**Built-ins**

- ◆ **Hardened** Microsoft® Windows Mobile™ 5.0 Operating System
- ◆ Large 65K Color Touch Screen Displays
- ◆ GPRS/EDGE High Speed Data
- ◆ Bluetooth
- ◆ Micro SD Card slot
- ◆ USB
- ◆ SIM card Plug-in (3v)
- ◆ Integrated Antenna
- ◆ Internal Camera
- ◆ Built-in Vibration

**Interoperability**

Fully compatible with other CipherTalk products.

**Operator Provided Services**

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

**Physical**

Dimension	109 x 59 x 17 mm
Weight	168 grams
Display	240x320 pixel LCD 64K colors transreflective

**Environmental**

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

**Power**

AC adaptor	100 ~ 240 VAC 50/60 Hz
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**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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