



CSD 3324 SE Secure Telephone, Fax & Data Encryptor



**Providing integrated
voice, fax and data
secure communications
for mission-critical
government applications**

The CSD 3324 SE is an executive telephone with integrated secure voice, fax and data communications capabilities. The CSD 3324 SE is designed to provide strategic-level security with exceptional voice quality for government office applications. It also interoperates with TCC's DSP 9000 radio base military encryptor to connect commanders with field forces.

Secure Voice Encryption

The CSD 3324 SE uses powerful, 128-bit encryption driving dual, full duplex Tellect-SE data encryption engines. The DSP-based 9,600 bps vocoder provides excellent voice quality with fallback modes to 4,800 bps digital and DSP 9000 analog mode for secure voice communications over severely degraded phone lines and radio channels.

Group 3 Fax Encryption

Two-wire (RJ-11) Group 3 fax encryption is provided as a standard feature with auto-answer/auto-fax sense, which allows incoming calls to be screened by the telephone. If the call is not a fax call, the telephone rings, giving a user a second chance to answer incoming voice calls. User-friendly settings allow any incoming and outgoing fax call (plain or secure) to be accepted. The setting can also be changed to "Secure Only" to allow only secure faxes to be sent between CSD 3324 SEs.

Data Encryption

Rear panel 25-pin D serial data port allows connection to a PC or other data terminal to secure RS-232 file transfers.



Operational Features

Controlled access — User access to all secure fax, data and voice communications modes is restricted using user passwords.

Menu-based setup — User-friendly menus allow logical setup of the telephones speed dial, voice answering and fax handling options.

Trusted Heritage

The CSD 3324 SE is widely deployed internationally and is an evolutionary outgrowth of TCC's successful and internationally trusted CSD 3324E telephone.

Benefits

- Strategic-level security
- Excellent recovered voice quality (dual vocoder design)
- Interoperates with DSP 9000 radio base military encryptor
- Operates over degraded telephone line conditions with auto-fallback
- Easily connects to any Group 3 fax machine
- 128-bit encryption (Tellect-SE)
- Secret Local Key based — 800 keys
- User customizable Tellect-SE crypto algorithm
- Backward compatible with TCC's previous generation CSD 3324E



Crypto Management System with security vault generates and stores cryptographic keys.

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Technical Specifications

Non-Linear Key Stream Generator

Encryption Algorithms

TCC-Proprietary **Tellect-SE**

TCC-Proprietary **Tellect**

TCC-Proprietary **DSP 9000**

Cryptographic Key Variables

Tellect-SE Mode

Local Keys

Number 800 (2 Keybanks)

Size 128-bits per key

Diversity 3.40×10^{38} per key

System Keys - Look-Up Tables

Number 2 Tables

Size 256-bytes, each

Diversity 8.39×10^{79} (both tables)

Tellect Mode

Local Keys

Number 400 (2 Keybanks)

Size 64-bits per key

Diversity 1.84×10^{19} per key

Network Key

Number 1 (Common)

Size 64-bits per key

Diversity 1.84×10^{19}

System Key - Look-Up Table

Number 1 Table

Size 256-bytes

Diversity 9.16×10^{39}

DSP 9000 Mode

Local Keys

Number 800 (2 Keybanks)

Size 56-bits per key

Diversity 7.20×10^{16} per key

Network Key

Number 1 (Common)

Size 16-bits per key

Diversity 6.55×10^4

System Keys - Look-Up Tables

Number 2 Tables

Size 256-bytes, each

Diversity 8.39×10^{79} (both tables)

Key Loading

Via TCC SmartModule Key Fill Device or
via Keypad-Entry

Power / Consumption

Universal AC (85-264VAC)

@ 50/60Hz (7.5 Watts, Max)

DC Input (opt.): 10 – 30VDC

(6.5 Watts, Max)

Vocoders

9,600bps MPLP

4,800bps CELP

Primary Interfaces

Telephone Line:

Modular RJ-11 2-wire

Fax Line:

Modular RJ-11 2-wire

Asynchronous Data Interface:

25-pin D (EIA RS-232)

Data Modems

ITU V.32

(9,600bps; 4,800bps)

ITU V.22 / V.22bis

(600bps to 2,400bps)

Fax Modems

ITU V.29 & V.27/ter

Group 3 (9.6, 7.2, 4.8, 2.4kbps)

Operating Modes

Auto-sense Voice then Fax

Auto-sense Voice then Data

Fax Mode Only

Secure Fax only

Auto-sense secure/plain Fax

Environmental

0°C to +50°C operational temperature

10% to 90% relative humidity



Size / Weight

31.3cm x 27.2cm x 10.3cm^Y

2.32kg (5.1 pounds) – unpacked

^Y Height measurement includes
handset in cradle

Key Management Support

Crypto Management System

Windows-based application

Random number circuitry

Key fill device interface

Key Fill Device

TCC SmartModule

SmartModule-64K (64KB)

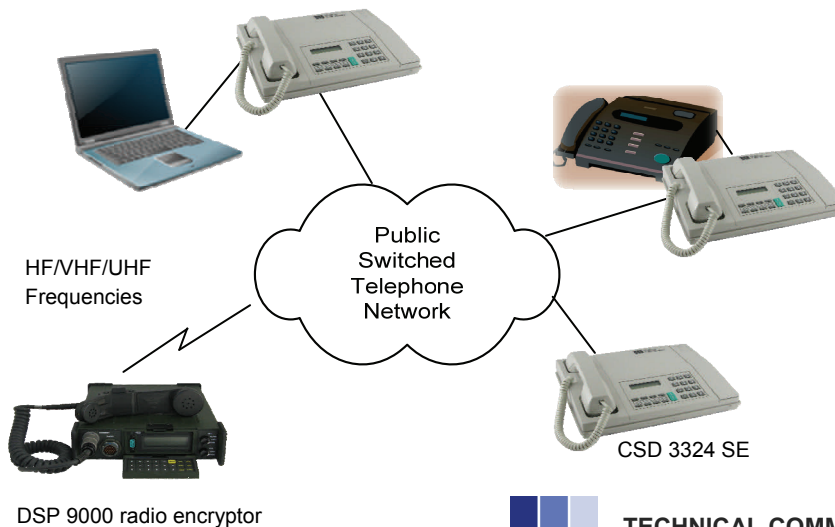
SmartModule-2K (2KB)

Options and Accessories

Ruggedized carrying case

Speakerphone adapter

Secure Voice, Fax and Data Communications as well as Telephone-to-Radio Voice Communications



For more than 50 years, Technical Communications Corporation has specialized in superior-grade secure communications systems and customized solutions, supporting our CipherONE® best-in-class criteria, to protect highly sensitive voice, data and video transmitted over a wide range of networks. Government entities, military agencies and corporate enterprises in over 115 countries rely on TCC's proven security to protect their communications.

