



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

A secure telephone and fax encryption system, the CSD 3324 SP secures voice conversations as well as connects to any Group 3 fax machine for secure fax communications. Using the AES 256-bit encryption algorithm and Diffie-Hellman public key exchange key management, the CSD 3324 SP provides proven cryptographic strength, and ease of deployment and operation.

Integrated Voice and Fax Security

The CSD 3324 SP secures voice and fax communications in a single telephone package. The CSD 3324 SP has a fallback mode that was originally developed for poor HF channels. As a result, secure communications are possible even over degraded line conditions. Its 9,600 bps MPLP vocoder provides excellent recovered voice quality with automatic fallback to 4,800 bps CELP as needed.

A universal, 2-wire RJ-11 fax interface is provided on the phone enabling fax encryption regardless of the chosen brand of Group 3 fax used. The fax capability is auto-answering and auto-sensing, allowing incoming calls to be screened by the telephone. If the call is not a fax call, the telephone "rings" giving the user a second chance to answer any incoming voice calls.



Incoming and outgoing plain (non-secure) and secure fax communications, or secure-only fax mode are supported. Secure fax and voice communication modes may be password restricted. Without the password, the CSD 3324 SP functions in only non-secure mode. User-friendly menus, which may be password protected, provide logical set-up of the CSD 3324 SP's voice answering and fax handling options.

Cryptographic Strength

The CSD 3324 SP protects voice and fax calls using Advanced Encryption Standard (AES) encryption engines seeded using Diffie-Hellman public key auto-negotiated 256-bit session keys, and path-independent initialization vectors.

Benefits

- Strategic-level security for voice and fax communications
- Excellent recovered voice quality
- Easily connects to any Group 3 fax machine
- AES-256 with Diffie-Hellman public key exchange for simplicity, cryptographic strength and ease of use
- Interoperable with TCC's CSD 3324 SPF secure fax system
- Auto-sensing incoming plain or secure fax
- User-friendly menu-based set-up
- 50 stored names and phone numbers; last number redial feature

CSD 3324 SP Secure Telephone and Fax Encryptor

Technical Specifications

General Features

Ease of installation and set-up:

1. Connect power
2. Connect phone line
3. User-friendly menus for changing factory-configured settings

Stored phone numbers:

50 names and phone numbers

Last number redial feature

Auto-answer/fax sense:

User-configurable: number of rings

Display & keypad:

Display: two-lines x 16 characters, liquid crystal display

20 push-button keypad:

12 button standard telephone

8 function key buttons

Dimensions & Weight

Width: 31.3cm (12.3 inches)

Depth: 27.2cm (10.7 inches)

Height: 10.3cm (4.1 inches)

Weight: 2.32kg (5.1 pounds) unpacked

Power

Primary AC power:

100-240VAC 50/60Hz

9.5 watts (nominal)

Auxiliary DC power:

Primary, or as back-up to AC

10-30VDC / 7 watts (nominal)

Environmental

Operational Temperature 0°C to +50°C

Relative Humidity: 5% to 95% non-condensing

Cryptographic

AES-256

Public key management:

Diffie-Hellman public key negotiated session keys and initialization vectors (IVs)

1,024-bit D-H Modulus

Six authentication characters — used to prevent “man-in-the-middle” attacks

Key generator:

Advance Encryption Standard (AES)

— 256-bit session keys

Dual AES key generators:

Full duplex

Path-unique initialization vectors

Security Features

Secure mode access with secure mode password

Menu access password

Line Side “Black” Interface

Telephone line interface — 2-wire, RJ-11 phone line I/O

Customer “Red” Interfaces

Fax interface:

2-wire, RJ-11 facsimile I/O

Group 3 (9.6, 7.2, 4.8, and 2.4 Kbps)

Voice interface:

4-wire handset analog signal port (modular RJ-8)

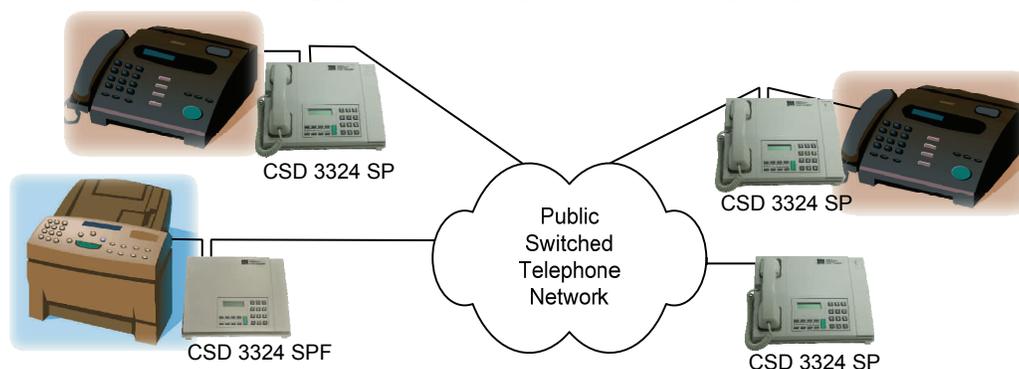
Voice digitization (vocoders):

9.6 Kbps MPLP

4.8 Kbps CELP (fallback)



Secure Voice and Fax Network



TCC's CSD 3324 SP secures voice and fax communications. For secure fax, just connect the CSD 3324 SP to any Group 3 fax machine. The CSD 3324 SP is also interoperable with the CSD 3324 SPF secure fax encryptor.

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 have selected TCC's proven security to protect their communications.

