TCC

**TECHNICAL
COMMUNICATIONS
CORPORATION**

Secure Communications Solutions

COMMUNICATE IN CONFIDENCE

GLOBAL SECURE COMMUNICATIONS EXPERTISE

For more than 50 years, TCC has specialized in designing, manufacturing, marketing and supporting superior-grade secure communications systems and customized solutions that protect highly sensitive voice, data and video information transmitted over a wide range of networks. Communications security is an essential part of a cybersecurity strategy. TCC's solutions are optimized for cryptographic strength, performance and ease of use, supporting our CipherONE® Optimized Network Encryption best-in-class criteria.

With our solid reputation, TCC has established many long-term relationships around the globe, while our large base of international representatives, direct sales force, and technical field staff give each customer personalized service and support. With a commitment to excellence, TCC has been ISO 9001 certified since 1995 for its stringent company-wide quality management system and processes. Today, government entities, military agencies and corporate enterprises in over 115 countries have selected TCC to protect their mission-critical communications.

UNIVERSAL RADIO ENCRYPTION AND SECURE VOICE CONFERENCING

TCC's DSP 9000 military radio encryption systems, and the HSE 6000 squad radio headset and telephone encryptor for public safety special operations are interoperable systems providing end-to-end secure communications for air, land, sea and office. Additionally, with X-NCrypt® Cross Network Cryptography, TCC's solution enables multiparty secure voice conferencing across and between radio and telephone networks.

The DSP 9000 radio encryptor is available in base station, manpack, and implant board configurations. The HSE 6000 is a self-powered pocket-sized encryptor for land mobile radios. The HSE 6000 is ideal for public safety, first responders, security agents, border police and special operations teams, as well as military forces.

Our systems operate with most radio makes and models, and all HF, VHF, and UHF bands. They also seamlessly overlay

on existing voice networks — no infrastructure changes are required. Our best-in-class systems deliver strong communications security while maintaining excellent voice quality and crypto-synchronization even in the harshest field and network environments. Our products are also easy to use, deploy and manage.

The **HSE 6000** headset radio encryptor and **DSP 9000** military radio encryption family interoperate and work with most radio makes and models.

SECURE TELEPHONE AND FAX COMMUNICATIONS

TCC's HSE 6000 headset radio encryptor also connects to corded handset telephones, enabling secure commander's conferencing over VoIP, digital and analog telephone networks, and across and between radio and telephone networks. It also provides the capability to secure voice mail messages.

TCC's CSD 3324 SE secure voice, fax and data telephone is in use by defense forces and federal agencies in several nations. It also interoperates with the DSP 9000 radio base unit encryptor for direct PSTN to radio secure communications. With an

HF radio frequency fallback mode, our customers have highly secure voice and data communications with excellent voice quality even in severely degraded line conditions.

Our CSD 3324 SP secure telephone protects voice and fax communications using the Advanced Encryption Standard crypto algorithm powered by 256-bit session keys. TCC's CSD 3324 SPF fax encryptor connects to Group 3 fax machines and is fully interoperable with CSD 3324 SP fax encryption.

HSE 6000 headset radio encryptor enables secure commander's conferencing.

CSD 3324 SE voice/fax system maintains exceptional voice quality in harsh environments.

CSD 3324 SP voice/fax system has AES-256 and public key.

CSD 3324 SPF secures Group 3 fax machines and is interoperable with the CSD 3324 SP telephone/fax system.

SECURE MOBILE PHONE COMMUNICATIONS

TCC's CipherTalk® 8000 secure mobile phones provide secure end-to-end worldwide voice communications. Secure calls are enabled over all GSM bands and data protocols, including GPRS, EDGE and 3G. In addition, the CipherTalk 8000 can set up secure calls connecting directly to the Internet via Wi-Fi, USB, Bluetooth and satellite links, all without the need for a SIM card. The CipherTalk 8000 is designed on commercial smartphone platforms, ideally suited for use by covert operators in plain sight.

CipherTalk 8000 secure mobile phones provide end-to-end encrypted voice communications worldwide without requiring a SIM card.

NETWORK ENCRYPTION — MILITARY, INDUSTRIAL AND CORPORATE

IP Encryption

TCC's Cipher X® 7211 IP encryptor secures LAN to LAN and global WAN data in transit, including multicast applications such as video conferencing. It is a wirespeed, tunneless, Layer 3 or 4 solution offering scalable performance at data rates from 100 Mb/s to 1 Gb/s. Users purchase only the bandwidth needed in 100 Mb/s increments, and upgrades are licensed and deployed on-demand centrally via the KEYNET IP Manager key and device management system. Acting as a transparent network overlay, no network modification is required to provide network encryption. With a robust security policy engine, the Cipher X 7211 supports a broad array of network applications and security requirements. It is a hardware-based solution designed to the FIPS 140-2 Level 3 standard. The standard offering is AES-256, and national algorithms can be integrated without hardware modification.

The Cipher X 7210 IP encryptor is for lower capacity applications and interoperates with the Cipher X 7211. The combination enables end-to-end secure communications from user to user, as well as at LAN and WAN network endpoints. The Cipher X 7210 is designed in industrial and rugged industrial configurations.

SONET/SDH Encryption

TCC's innovative DSD 72B-SP and DSD 72A-SP (STM) SONET/SDH network encryption family is based on the AES 256-bit encryption algorithm while national algorithms can be integrated without hardware modification. The encryptors have wirespeed 155.52 Mb/s and 622.08 Mb/s performance, and are designed to meet a wide range of environmental and operational requirements for military, rugged industrial and industrial environments. All encryptors interoperate and are centrally managed by the same KEYNET Optical Manager system. The product's path encryption provides end-to-end virtual container encryption that allows unrestricted network routing of virtual containers with no plaintext network exposure of the path-encrypted payload. The encryptors are hardware-based and designed to the FIPS 140-2 Level 3 standard.

Secure Military Command Networks

TCC is a market leader in providing ruggedized military encryption products for use internationally. Our cryptographic technology ensures secure communications with crypto-synchronization techniques developed to maintain connections in high error and jamming environments. TCC's DSD 72A-SP military bulk encryptor is in use today protecting missile firing commands for leading missile systems. The DSD 72A-SP offers automatic key management, customized algorithm interface capability and ease of use.

Cipher X 7211 IP encryptor has scalable performance up to 1 Gb/s.

Cipher X 7210 IP encryptor secures lower-speed networks.

DSD 72B-SP (RI) SONET/SDH encryptor for rugged industrial environments.

DSD 72B-SP (I) SONET/SDH encryptor for Industrial environments.

KEYNET provides automated and centralized key and device management.

DSD 72A-SP (STM) SONET/SDH military encryptor for optical data networks.

DSD 72A-SP military bulk data encryption system.

Custom Solutions for OEM Suppliers and Systems

Unique to the industry is TCC's customized security solution services. Through threat assessments, site surveys and engineering expertise, TCC designs security solutions to meet specific customer requirements. Whether developing a product for a new application or integrating a national algorithm into state-of-the-art architecture, TCC combines its extensive encryption expertise and broad telecom engineering skills to provide tailor-made, integrated secure communications systems.

TCC's significant experience in the development of specialized, embedded encryption technologies is being applied to the built-in encryption needs of Original Equipment Manufacturers (OEMs) and suppliers of communications networks and systems. User requirements for communications security can be effectively and transparently met with the use of TCC's encryption technologies integrated into our partner's communication equipment. These valued relationships enhance our partner's communication products.

Customer Support and Satisfaction

As a result of our dedication to customer service and high quality products, TCC's worldwide customers demonstrate their satisfaction by continuously turning to TCC to expand their secure communications networks and for new solutions to meet their specific security requirements.

TCC provides personalized, comprehensive on-site user and field service training. The ease of use and serviceability that is designed into our products is validated by the satisfaction our customers gain when we install and test our systems at customer locations.

Opportunities for Growth

It is essential that TCC's customers have secure access to globally dispersed, critical information to conduct ongoing activities. At the same time, the increasing volume and sophistication of security threats worldwide to our customers' communication networks, systems and data are evidence of the need for comprehensive secure communications and network encryption solutions as a critical part of a cybersecurity strategy. TCC is uniquely capable to provide a broad portfolio of products as well as specialized, custom solutions to secure voice, data and video communications for the most demanding customer requirements.

TECHNICAL COMMUNICATIONS CORPORATION

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