

# EPIC Terminal Line Encryption Solution

## Payment Card Industry

The evolution of the electronic transactions happened quite fast during the last two decades with the rapid growth of the telecommunication infrastructure and other Information Communication Technologies (ICTs), such as enterprise IT systems, the Internet and mobile gateways. Today, the electronic payment cards have become very convenient and innovative instruments for transactions almost everywhere in the world.

However, with the use of smart cards in massive scale has resulted in greater risks involved with the cards such as skimming, cloning of cards and identity thefts. With the technological innovations, fraudsters, thieves and organized criminal gangs have invented new methods to skim and clone the cards and use these cards without the knowledge of cardholders. Such frauds create various risks inclusive of financial losses to both cardholders and card issuers. More precisely, in Point of Sale infrastructure, attackers can easily tap the transmission media and gain the access to transaction data packets transferred from the terminal to the bank host or direct the transaction data packets to fraudulent hosts other than the actual bank host. Moreover, most of the point-of-sale (POS) terminals often collect and store the data held in the magnetic stripe on the back of a credit card each time a card is swiped. Retailers are often unaware that their POS applications collect so much information. Most of the frauds have taken place due to this. Use of manual key injection for POS Terminal authentication purposes is also still taking place in many places resulting unsecure terminal data access.

## Policy Measures and Legitimate Background

Due to the security concern on online transactions, almost all the industries are working on ensuring the security of their solutions. Dozens of security standards regulate your customers' identifiable information, and the number of requirements just keeps growing. The need to comply with these privacy and information control requirements is creating mounting pressure on IT organizations to manage risk. However, existing policy measures on POS terminal software/ encryption mechanisms are yet inadequate to ensure the security of payment card transaction data and there are no constant rules and regulations for card based transaction data transmission yet initiated in many countries. The rules and regulations on the customers, terminal vendors, banks as well as the merchants yet to be developed to support secure transactions through POS terminals.

Therefore the industries can look into various ways to come up with solutions which can optimize, secure, and transparently scale the applications that businesses need to run and interact with customers and partners, while also mitigating the risk of security breaches.



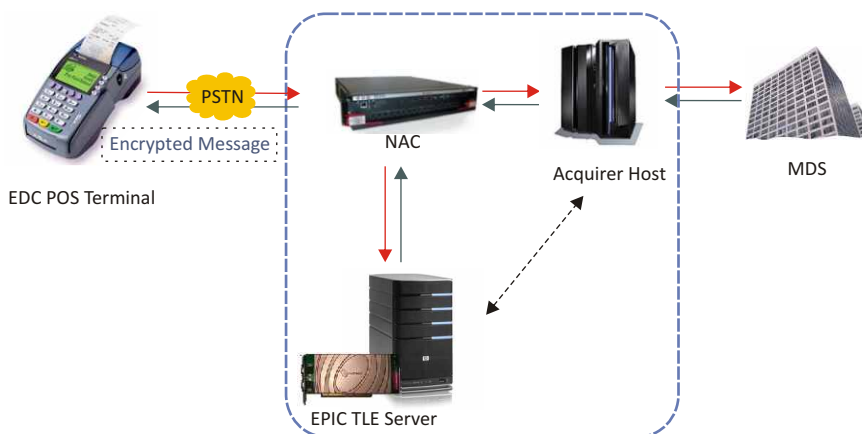


## Epic Terminal Line Encryption Solution

The “Epic Terminal Line Encryption” is an extremely secured communication channel encryption solution which offers an encrypted terminal line from the POS terminal to the Bank acquirer host when transferring transaction data packets during online transaction processing. The beauty of this solution is the use of latest, proven and industry standard cutting edge technologies to encrypt all the sensitive data fields in the transaction data packet. The “Epic Terminal Line Encryption” System is geared towards securing online transactions from threats faced due to unsecured communication channels from the terminal to the acquirer host while making the process more effective and efficient. In fact “Epic Terminal Line Encryption” System is an extension to the available electronic transactions processing systems of all the banks.

The total “Epic Terminal Line Encryption” System is designed in a way, which supports existing banking infrastructure. It uses a Line Encryption Server which facilitates the encryption and decryption of the transaction data packets and the Protect Server Gold HSM to support automated secure key generation and key injection process. The entire solution consists of following modules.

1. EPIC Terminal Line Encryption Server (EPIC TLE)
2. POS Application
3. Hardware Security Module ( *Protect Server Gold* )
4. Line Encryption Server Web Application



## About EPIC Lanka

With a proven track record of 12 years and an array of award winning solutions, Epic Lanka dominates the secure electronic payments and information systems security domains in Sri Lanka. The company won the highest number of awards at the National Best Quality Software Awards organized by British Computer Society, Sri Lanka section for 3 consecutive years of 2007, 2008 and 2009. Epic Lanka brought glory and fame to Sri Lanka by winning the first ever Gold Award at the Asia Pacific ICT Awards 2008 and also secured the National Business Excellence Award in ICT sector in 2008 and 2009.

*Epic Lanka as the technology leader in offering innovative ICT solutions to banking industry represents SafeNet in Sri Lanka with award winning performance.*

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