# TRITTICO Srl

# TCard

**PIN printing and PIN generation system.**

**Highlights:**

- **Top level security with the printer directly connected to the HSM crypto device**

- **High printing quality through laser printers**

- **PIN protection in a simple, elegant and quick way by means of special labels**

- **Complete and reliable LOGs and reports**

- **Full compliance with banking security standards**

TCard is a complete solution for the management of every phase of the PIN generation and printing and of the relevant security codes needed for issuing a debit or credit card.

TCard architecture grants the highest degree of security in data protection and total compliance with banks and international credit cards issuers requirements.

TCard is interfaced in a native way to the HSM, using specific procedures and encryption techniques, designed for an extremely high logical and physical protection of data along all the steps of the production cycle.
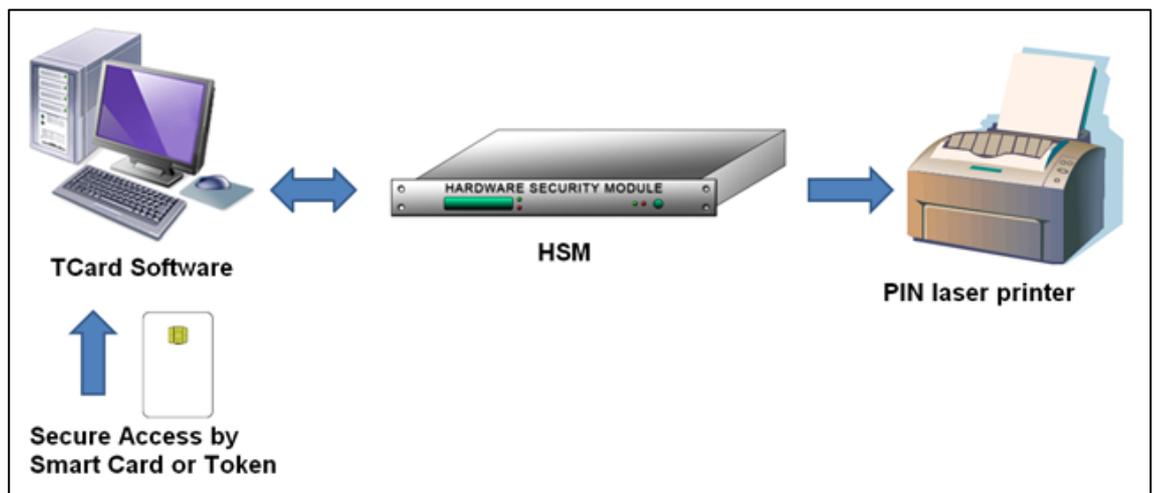
The **access control** to the system is performed through a strong multi-level authentication architecture. The operators can be enabled only by using both their personal password and a hardware device (smart card or token or USB pen). For each of them a different authorization level can be defined. Operators access and authorization procedure can be personalized allowing the bank to implement its own security policy: as an example, two or more operators might be required for allowing specific operations, each of them with their own smart card.

The PIN codes are decrypted just before the printing phase through the use of HSM devices: this grants the maximum security level as sensitive data are never handled unencrypted whatever is the software layer.

All details of each operation are recorded in an **encrypted log**, allowing any subsequent monitoring and control. A counter in the application provides full **statistics** of the PINs generated, with the indication of the operator who activated the relevant printing. This counter is fed directly by the HSM; it hence provides an extremely reliable indication of the number of secret codes sent to the laser printer.

The use of **special removable labels** and of a specific ink, already supplied together with the paper sheets, keeps the printed PIN invisible until the label is easily removed by the bank customer who receives it. Any unauthorized access or attempt to remove the label can be immediately detected by the bank customer.
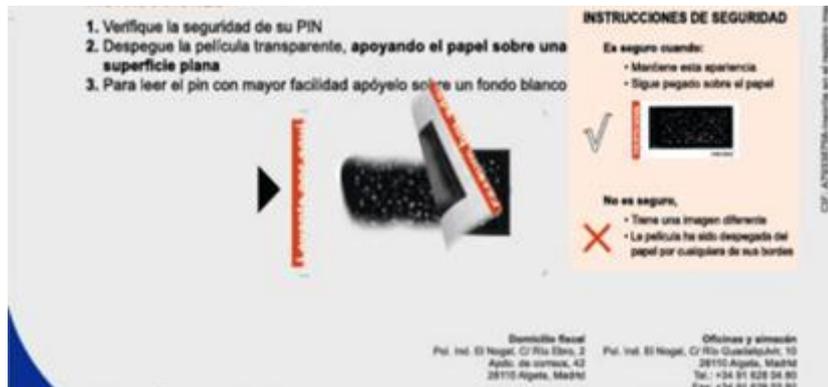


TCard software allows a completely **personalized printing** process, in a flexible and safe way. The bank can create its own forms to be printed, configured with personalized texts and images. It is possible to use any text editor at customer's choice. The PINs related to different types of cards will be automatically printed on the form specifically foreseen for each of them, in a **single printing step**. As further personalization can be added at the same time also the customer's name and other customer data. The result of this single step printing operation is a sheet ready for being shipped to the final customer, including the removable label hiding the PIN.

The use of a laser printer allows printing the forms with a professional **graphic quality**. The system is compatible with laser printers of different types and performances.

An optional software module can generate all the **security codes** needed for issuing cards of different types: Visa, MasterCard, Cirrus, Maestro, etc. These security codes include PIN, PINBLOCK, AP, PKC, CVV, CVC, PVV, etc.

A final remark: Trittico is available to tailor the TCard software following any request from its customers.