D800 DCVV Displaycard with DYNAMIC CVV

Secure On-Line Payments against Card Not Present frauds

According to BCE statistics, 70% of total frauds on payments cards are due to CNP transactions, that's to say Card Not Present Payments. This can be overcome adopting new and better performing cards with Dynamic Security Code for On-Line Payments.

The IRETH product portfolio includes DCVV - Displaycards with Dynamic CVV, a technology ensuring high level of security, with low impact:

▶ **Payment Processor**

The Payment Processor only need to install a validation DCVV server, that is the IAP800 Server, synchronized with the same algorithm present on the card, generating the dynamic code.

▶ **e-Merchants**

e-Merchants don't need to make any change on their web sites: the crypto dynamic code that is generated by the card is used exactly like the standard one and must be insert on the payment page of web sites, without further pop-up windows.

▶ **Cardholder**

The approach for cardholder is completely transparent:
- No need to download of any plug-in on the browser
- No need to access further payment page or pop-up windows.
- the code appears at the same location on the card

The cardholder, in fact, can manage the on-line shopping experience as usual, but the card data will be protected with a much better level of security: instead of the static CVV (easily clonable), the user will type on payment page the dynamic CVV generated by the display on the card. The CVV is refresh regularly and is valid just for a limited period of time (ex. 30''), so the code can be typed only by the person who physically has the card in the hands.

⟹ *ease to use*
⟹ *much better customer experience than other dual-devices solutions (like payment card + separate OTP)*
⟹ *high security level,*
⟹ *more confidence felt by the cardholder and so*
⟹ *more transactions, and hence greater profit for the bank*

DCVV Displaycard with Dynamic CVV

- ISO7810/ISO7816
- DCVV validation OATH
- Refresh Timing: 30'' or customizable against MITM attacks
- 1 button for DCVV generation
- No button on request
- Response time: 260ms
- Display: 3 digits for CVV
- Battery: Thin Battery - 3 years autonomy, 57.000 uses
- Operating Temperature: 10°C ÷40°C
- Storage Temperature: -10°C ÷ 50°C
- Magnetic Stripe
- Can be certified by VISA® and Mastercard®

D800 is extremely portable, allowing a remarkable usability, mainly for 'Mission Critical' services, like Home Banking.

D800 allows for dual factor authentication with the highest integrity and protection standards, able to perform secure on-line accesses and transactions. D800 is the only Cost-Effective and Portable Displaycard that can be used easily for on-line services anytime and anywhere.

All the cards in the **D800 suite** are **ISO 7810 and can be ISO7816**, compliant with: IETF, FCC, UL, CE, OATH, EMV, PKCS, RFID standards.
IRETH can issue customized versions, with graphics, user data and brand.

The D800 supports:

⇒ different Algorithms and Protocols: OATH (HOTP, TOTP, OCRA-1), CodeSure, CAP-PLA, SM3, Custom (on demand)

⇒ different HASH Algorithms: SHA1, SHA256, SHA384, SHA512, SHA3, Custom (on demand),

Each D800 model can embed any kind of payment component: EMV, EMV Dual Interface, NFC, Dynamic CVV, Dynamic PAN, and others (*All-In-One Displaycards*) and Communication protocols, like Bluetooth, NFC and IRETH optical LDT

IRETH **D800 Displaycards** are the most innovative and powerful cards for Strong Authentication and Anti Fraud, ideal to *secure Banking, On-Line Transactions, Web Retailers, Remote Access* and to make *Remote Signing.*

They can be issued according to OATH standard, or other specific algorithms (i.e. IRETH RCR, CodeSure, CAP, etc.). OATH is the standard for universal OTP authentication.

With IRETH **IAP800®** Authentication Server, D800 suite represents the most competitive solution against phishing and on-line frauds**.**
D800 Series Displaycards excel in terms of security and cost; they have very good response time and don't have rainbow effect on display.

D800 is Multi-channel, Multi-purpose and Cost-Effective, in ISO7810 credit card form factor with E-ink or LCD Display (on demand) and ultra thin battery technology.

D800™ Series - Common Features

- *Any OATH Certified Server compliant*
- *Easy & Ready to be used*
- *Excellent card manufacturing*
- *Superior Design and engineering of display by E-Ink technology*
- *Excellent card appearance*
- *Tamper resistant*
- *Torsion: ISO/7810   1.000 Cycles minimum*
- *Bending: ISO/7810   1.000 Bends minimum*
- *Battery: Thin Battery - 3 years autonomy, 33.000 uses – 5 years autonomy, 25.000 uses*
   (lightly different for Bluetooth, ONDA, LDT models)
- *Display: Electronic paper display (E-Ink) - flexible, sharp, ultra thin, no rainbow, 179° view angle, contrast ratio 7:1;*
- *Display size: 6/8 digits (numeric or alphanumeric)*
- *Tactile buttons with exclusive click feeling technology*
- *Embossable or Laser Engraved, (Embossable not for Keypad models)*
- *Optionals: Magnetic stripe, Crypto chip, EMV chip, RFID chip*
- *Custom Artwork: high quality offset, thermal transfer, laser serialization*
- *Water proof*