

## BIOMETRIC DISPLAY CARD FOR ONE TIME PASSWORDS

The CardLab Verity Card is a TOTP card (Time-based One-Time Passcode) that generates a new, unique secure code every 30 seconds.

Each code is created directly on the card by combining a securely stored hidden secret with the current time, derived by an on-board quartz crystal. No phone, app, or network connection is needed to make the code.

Because the codes are constantly changing and expire quickly, the risk of theft or reuse is significantly reduced.

Verity is a credit-card-sized device with a fingerprint sensor and a small, 6 or 8 digit e-paper display.

### KEY FEATURES

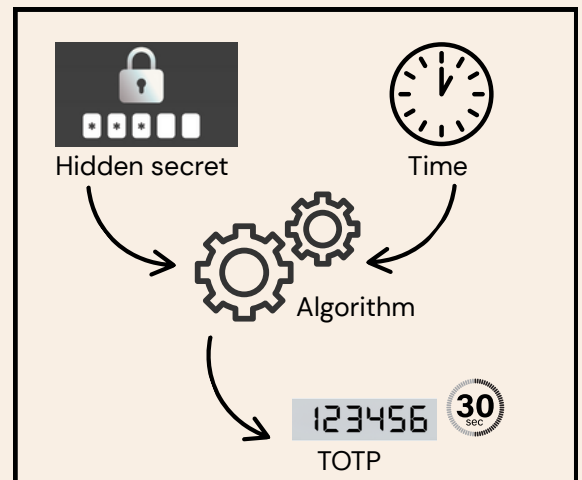
- **On-card biometric unlock:** fingerprint stays on the card.
- **On-card TOTP:** secret sealed in a secure chip, code generated locally.
- **Standalone operation:** show the code on the e-paper display – no phone required.
- **Low friction:** fast, consistent, and easy to use
- **Compact card form factor:** clear, time-limited code display
- **Lifetime:** typical 3 years



### HOW CARDLAB VERITY WORKS

- Press the switch to turn on the card
- Touch the fingerprint sensor, if the fingerprint matches the one registered to the card, the card will unlock.
- The card derives a TOTP from its hidden secret and current time.
- The code is displayed for the user to enter where required.

Note: Verity is battery-powered to support biometric unlock and on-card TOTP generation



### BENEFITS TO YOUR BUSINESS

- **Deliberately simple:** A self-contained factor that works anywhere.
- **Offline by design:** Unlock with your fingerprint; the card computes a one-time code locally – no connection to any external device, system, or network.
- **Consistent user experience:** Simple and quick flow whenever it is required.

### CUSTOMIZATION AND SUPPORT

We offer customizable options for branding, card artwork, and enhanced security features. In addition, the card comes with a 12-month global warranty and is backed by CardLab's Technical experts support team.

### TECHNICAL SPECIFICATION

Product Type	Electronic Biometric Smart Card
Smart card use case example	TOTP generating card E-banking E-commerce E-government Access PIN code
Dynamic code examples on display	TOTP, CVV, PIN
Secure Element	TBD
Card operating temperature	+5 to +40 C
MCU	32-bit Arm Cortex-M4 1Mbyte Flash 128Kbyte SRAM
Size	ISO/IEC 7810 ID-1 (85.60x53.98x0.8mm)
Battery	Primary battery, three-year lifetime with three card usages/day
Fingerprints enrolled	Standalone
Fingerprint enrolment	Direct on card fingerprint sensor
False reject and false acceptance ratio	FRR: <1.4%, FAR: <0.0019%
LED	LED card status indicators
Power management system	CardLab patented system
Card activation system	Tactile switch
Graphic options	Customizable graphics
Size	ISO/IEC 7810 ID-1 (85.60x53.98x0.95mm)
Storage temperature	-40 to +80C
Lifetime	3 years typical

#### CARDLAB INNOVATION APS

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