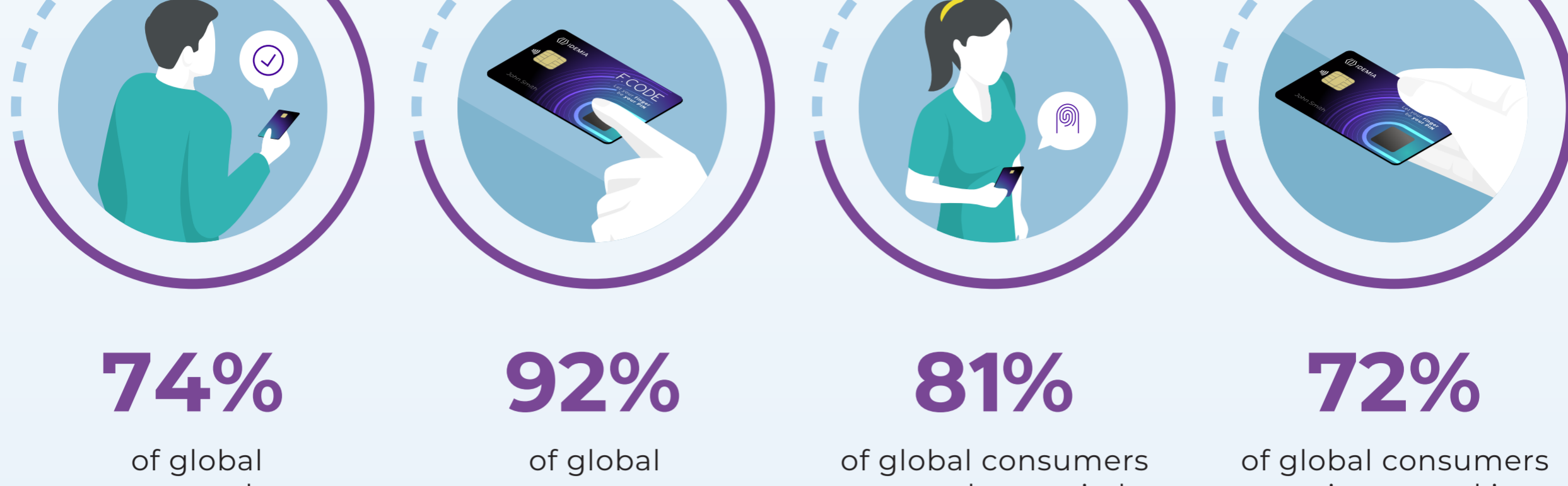


TAKING THE PAYMENT CARD INTO THE BIOMETRIC WORLD

Today, unlocking a smartphone by entering a PIN feels antiquated. However, it wasn't so long ago that this was a regular part of our daily lives. In 5 years, will PIN codes for payment cards feel as out-dated as they do for smartphones today?

1

CONSUMERS AROUND THE WORLD EMBRACE BIOMETRIC AUTHENTICATION*



74%

of global consumers have a positive attitude towards biometric technology

92%

of global consumers find authentication via fingerprint convenient

81%

of global consumers are ready to switch from PIN codes to fingerprint authentication

72%

of global consumers are interested in using contactless payments for high-value payments

F.CODE

IDEMIA proposes a new generation of payment cards that replace the PIN at point-of-sale by **biometric authentication** using **fingerprint**



The card embeds a fingerprint biometric sensor and a certified biometric algorithm to bring **unique and universal authentication** while reinforcing the cardholder's **security and privacy**.

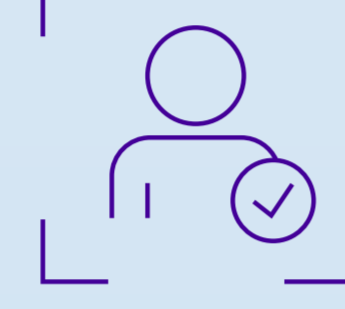
By leveraging **core competencies** in **biometric security** as well as **payment cards**, **IDEMIA** is **uniquely** placed to provide performing and cost competitive biometric payment cards, along with their enrolment solutions.



Increasing card spend

↓

Contactless for high value amounts



Reassuring customers worried about touching payment terminals

↓

Authentication without entering a PIN



Reinforcing bank brand with an innovative offer

↓

Biometric technology



Reducing friction

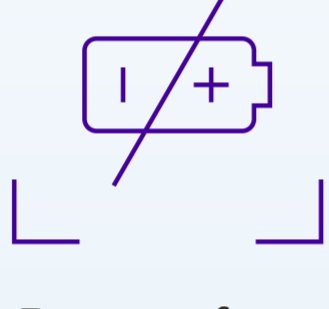
↓

No declines due to PIN mistyping

2

F.CODE: A BIOMETRIC SENSOR INTO AN ISO PAYMENT CARD

Seamless authentication using your F.CODE card



Battery-free, Contactless Mastercard, Visa, no LED



2nd Generation of Biometric Card

Dual interface

Laser personalization

Biometric sensor

BIO IN YOUR CARD...



- Faster
- Scalable manufacturing
- Geared for volume



PIN replacement**

Fingerprint sensor integrated on an ISO standard payment card



With any terminal

No change for customer or merchants
Easy to deploy and use



No database

Fingerprints stored in card secure element, never leaving the card

3

F.CODE: ENROLL SECURELY AT HOME IN MINUTES

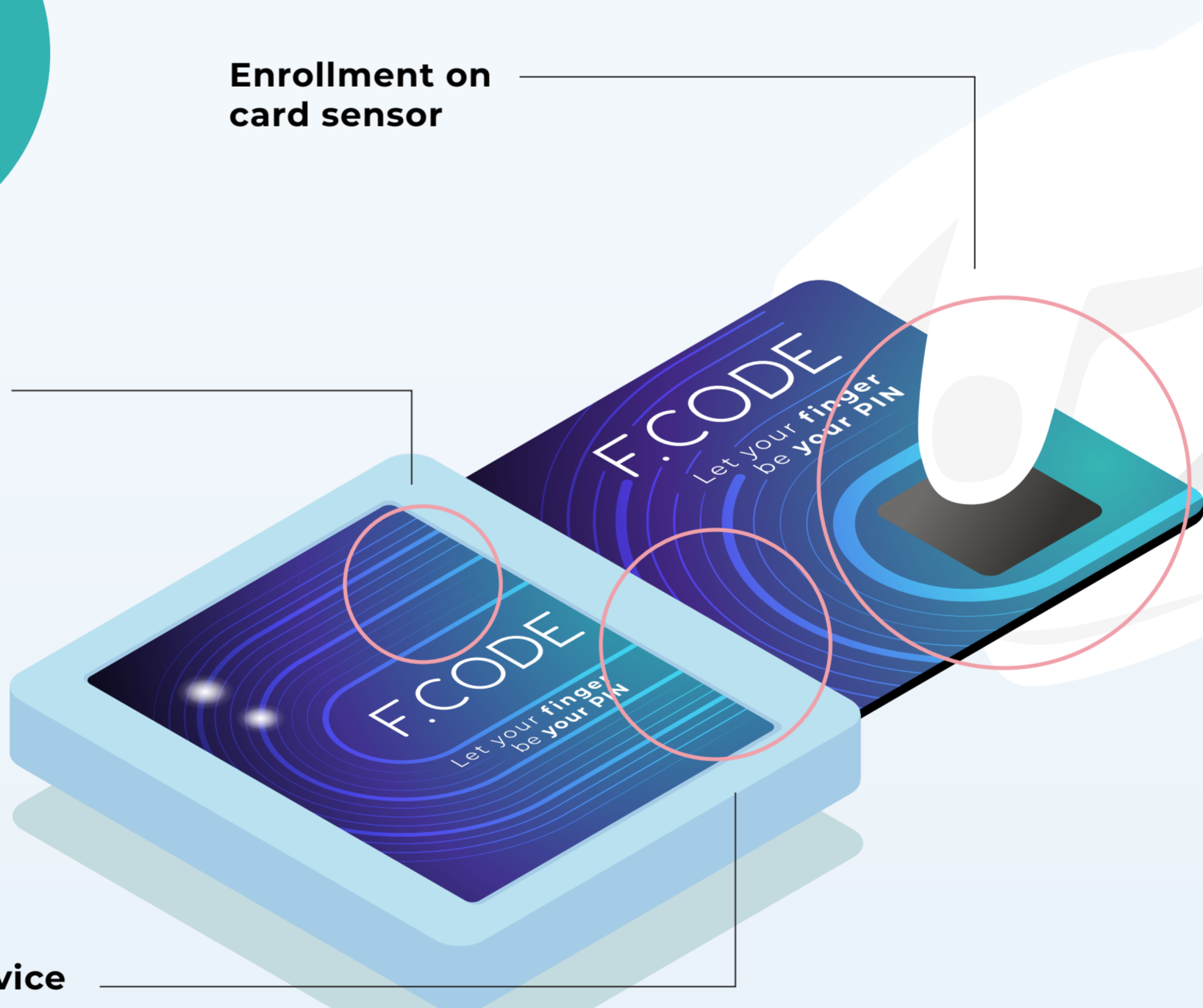
Sleeve device shipped with the card (or separately if the issuer wishes to do so) directly to the user for fast and easy enrollment

ENROLL YOURSELF

LED indicator

Enrollment on card sensor

Autonomous enrollment device



At home

Self powered sleeve, USB as an option. Shipped with the card and its packaging



Secure

PIN payment requested at first transaction to activate new biometry enrollment



No database

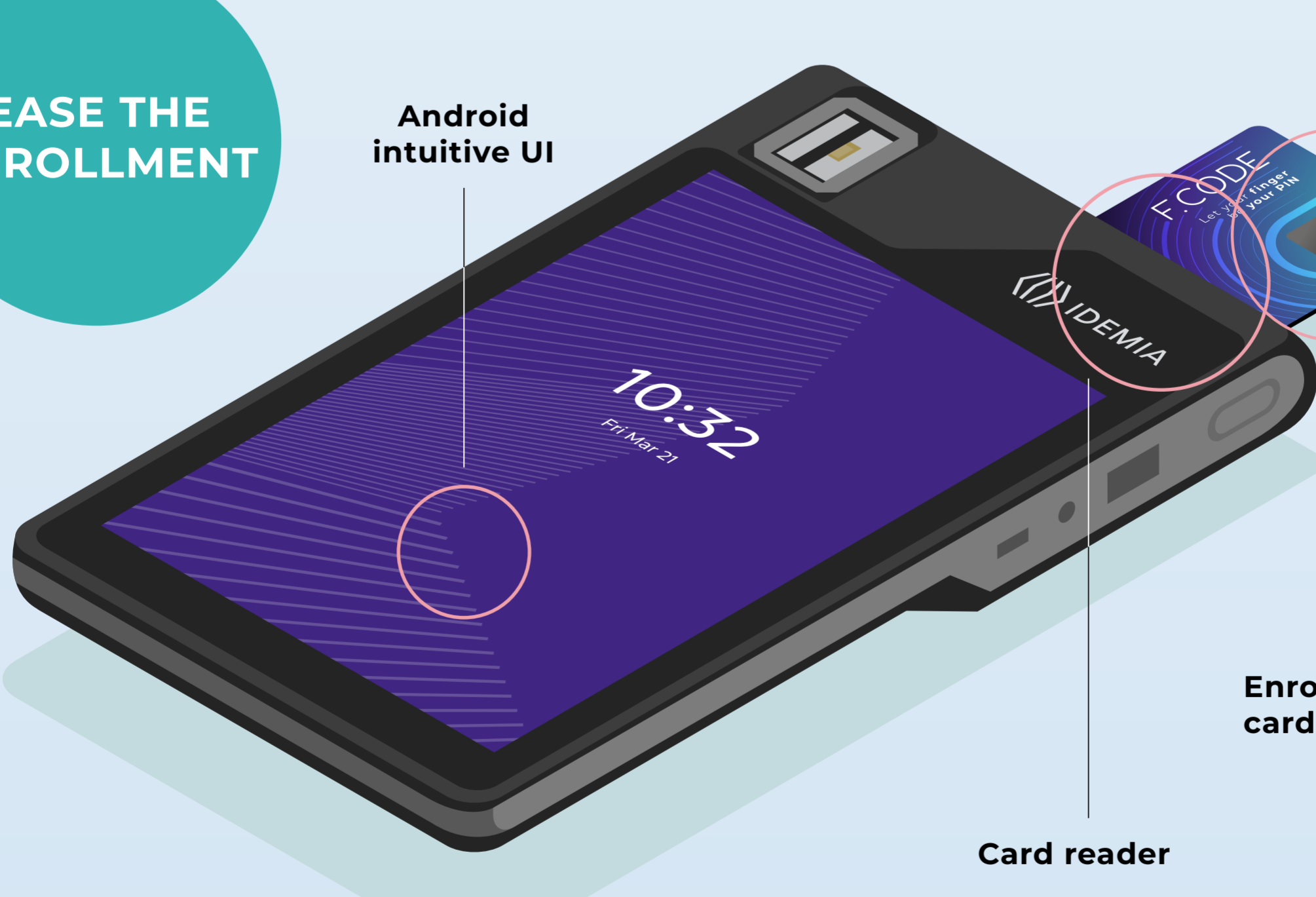
Fingerprints stored in card secure element, never leaving the card

F.CODE: ENROLL SECURELY IN BANK BRANCH

A device suited for branch enrollment and bank needs

EASE THE ENROLLMENT

Android intuitive UI



Enrollment on card sensor

Card reader



In branch

Guided enrollment using the 8" display on Android 10 device with integrated card reader

+ Software Development Kit also available for Android 10 or Win 10



Secure

PIN payment requested at first transaction to activate new biometry enrollment

Fingerprints stored in card secure element

* Dentsu Data Lab, encompassing 3422 people in 14 countries, 2021

** PIN still needed at ATM

IDEMIA is a market leader both in **biometric** and **payment cards** (800M payment products manufactured in 2020). We are able to offer an **end-to-end** solution for biometric cards, including enrollment, biometric data management, card production, and personalization.