

ADVANCED BIOMETRICS · EMEA

Palmki 2.0

Your palm is your key

The most privacy-friendly biometric access solution



Contactless & hygienic

Fast & simple

Secure

GDPR art. 9 compliant

Most privacy-friendly biometrics

ABOUT PALMKI 2.0

3rd Generation Access Control

Palmki 2.0 replaces badges, PIN codes and passwords with something nobody can forget, lose or copy: **your palm**. Near-infrared technology scans the unique vein patterns beneath your skin in under one second — contactless, hygienic and highly accurate.



1st generation

Keys & badges —
losable, copyable,
shareable



2nd generation

PIN codes &
passwords —
forgettable, phishable



3rd generation — Palmki 2.0

Your palm IS your key. Always with you, unique, unforgeable,
fully contactless.



<1s

Recognition

99.999%

Accuracy



Real Human Verification

In a world of robots and AI fraud, it is essential to be certain that a real person is requesting access. Palmki verifies both identity and humanity — irreplaceable for high-security environments.



Most privacy-friendly biometrics

Vein patterns are subcutaneous and invisible — they can never be passively captured. In an independent Ghent University study (2025), palm vein scored the lowest ethical & legal risk of all biometric methods compared.

5M

Reference points scanned

0%

Physical contact required

1:N

Identification or 1:1 verification

EMEA

Active in Europe, Middle East & Africa

WHY PALMKI 2.0?

Nine reasons to choose palm vein biometrics



No badges, cards or PINs

Badges get lost, shared or copied. Palmki 2.0 eliminates this risk: your palm is your key.



High biometric accuracy

Palm vein patterns are unique, internal and invisible. Unlike fingerprints they leave no traces on surfaces, and unlike faces they cannot be photographed — making them very hard to spoof.



Contactless & hygienic

No touching of shared surfaces. Ideal for healthcare, food and HACCP-certified environments.



Fast & simple

Recognition in under 1 second. No queues, no delays — faster than a badge or PIN code.



Most privacy-friendly biometrics

Vein patterns lie deep beneath the skin — not visible or copyable without invasive scanning. Legislation requires the most privacy-friendly biometric method; palm vein scored best in an independent Ghent University study.



Real Human Verification

Verifies not just identity but humanity — essential in a world of AI fraud and deepfakes.



Inclusive for all skin types

Near-infrared works regardless of skin colour, scars or dirt — fully inclusive for all users.



Compatible with existing systems

OSDP v2, Wiegand, REST API — straightforward integration with most existing access control systems. No replacement needed.



GDPR-compliant & legislation-ready

Palmki 2.0 is designed in accordance with GDPR Article 9 (special categories of personal data). Every user gives explicit consent at enrolment. Perfect-ID NV provides DPIA support, data processing agreements and consent workflows for the EMEA market.



Palmki 2.0 indoors and outdoors — surface-mounted, compact and contactless.

COMPLIANCE & PRIVACY

The most privacy-friendly biometric solution



Legislation requires the most privacy-friendly biometric method

When an organisation deploys biometrics, it is legally obliged to choose the least privacy-invasive biometric method that achieves the goal. In an independent Ghent University study, palm vein biometrics showed the lowest ethical & legal risk profile of the biometric methods compared — a strong basis for your proportionality assessment and DPIA.



INDEPENDENT SCIENTIFIC STUDY

"Voetbalveiligheid door middel van biometrische toegangscontrole"

(Football safety through biometric access control)

Vermeulen, G., Van Pée, J., & Dormaels, A. — Ghent University, Maklu, 2025

The study compared biometric methods on ethical & legal risk profile — independent of brand or product. Palm vein biometrics achieved the lowest risk score: 2 out of 7 risk factors.

Full study: hdl.handle.net/1854/LU-01JKVCHZJWB6BZ1MQNRJKK47WR

2/7

Palm vein
(lowest = safest)

3/7

Iris scan

4/7

Fingerprint

7/7

Face recognition



GDPR Article 9 — By design

Biometric data falls under special categories of personal data. Palmki 2.0 is designed with privacy by default: templates instead of photos, local storage on the controller, explicit consent of every user, right to erasure.



Government recognition — Belgian Ports

Recognised by Paul Van Tigchelt, then Deputy Prime Minister and Minister of Justice & North Sea, as official supplier of biometric solutions for Belgian ports. Compliant with the Royal Decree on Maritime Security & ISPS.

GDPR COMPLIANCE CHECKLIST

- ✓ Explicit consent of every user at enrolment
- ✓ Right to erasure built-in
- ✓ No data shared with third parties
- ✓ DPIA support available
- ✓ Data processing agreement available
- ✓ Purpose limitation per use case
- ✓ Data minimisation: templates, not photos
- ✓ Audit trail & logging built-in

SOLUTIONS

From stand-alone to fully integrated

ACCESS CONTROL



Palmki Stand-Alone

The complete Palmki solution for access control — including controller, software and sensor. All data is stored locally on the controller by default; cloud is optional. Ideal for organisations without an existing access control system.

Access Control

Time Registration

Optional cloud



Integration with existing systems

Palmki 2.0 connects to your existing access control system via OSDP v2 or Wiegand. No replacement of your current infrastructure — just an upgrade.

OSDP v2

Wiegand

REST API

ADD-ON OPTIONS



Time Registration

Automatic attendance registration without badges or separate terminals. Integrates with HR and ERP systems.



Payments & Loyalty

Pay and earn loyalty points with your palm. No card or smartphone needed. First palm payment in Belgium at Corda Campus (Hasselt).



Two-Factor Authentication (2FA)

Combine Palmki with a badge or PIN for extra security in critical zones. Ideal for data centres, pharma and government buildings.



Template-on-Card (TOC)

The biometric template is stored on the user's own badge — no central database. The user carries their own biometric data with them.



Flexibly deployable: Palmki scales from 5 to 50,000+ users. On-premise by default — data stays on the local controller — with cloud or hybrid as an option. All solutions are modularly built to your specific needs.



Palmki 2.0 at an interior office door (left) and integrated into an existing door frame (right).

USE CASES & REFERENCES

Proven in practice

⚓ MARITIME · HIGH SECURITY

Ports & Maritime Security

Secured ISPS zoning: only authorised personnel gain access. Compliant with the Royal Decree on Maritime Security. Officially recognised by the Belgian government.

⚽ SPORTS · EVENTS

Football Stadium — Fastlane Access

Fans enter the stadium in <1 second without scanning a ticket. Tested at KAA Gent. Helps prevent ticket fraud and ticket sharing.

🇧🇪 RETAIL · PAYMENT

Campus & Canteen Payment

Pay with your palm — no card needed. First palm payment in Belgium at Corda Campus (Hasselt). Leuven Bears fans pay with their palm.

🏢 DATA CENTRE · HIGH SECURITY

LCL Data Centres

2FA with template-on-card for access control. No central database — designed for strict data centre security requirements.

SECTORS



Office & Data Centre

Access control, time registration and cybersecurity



Healthcare & Pharma

Hygienic, contactless access for sensitive zones



Finance & Banking

High-security access and identity verification



Education & Campus

Payment, access and attendance registration



Industry & Logistics

Time registration and access at machines & warehouses



Ports & Maritime

ISPS-compliant, recognised by the Belgian government

Also deployable for: sports clubs (access & lockers) · airports (staff access) · pharmaceutical labs · residential

INTEGRATION

Works with your existing systems — no replacement needed

Palmki 2.0 connects to your existing access control system, time registration, HR software or payment system. Your investment remains intact — Palmki adds biometric security .

Your investment



OSDP v2

Open, vendor-independent protocol — works with OSDP-capable platforms such as Lenel, Genetec and C-CURE.



Wiegand 26/34/37

Direct replacement of existing badge readers, with minimal configuration.



REST API / SDK

Custom integrations via Android SDK or REST API. Compatible with Windows 11 & Android 7–14.



On-premise / Cloud

On-premise by default — all data stays on the local controller. Cloud or hybrid deployment available as an option.



POS & Payment

Connection to payment systems and platforms via the Alfa-Zet integration layer.



ERP / HR Systems

Direct connection for time registration and attendance management — no separate terminals.

SUPPORTED PROTOCOLS

OSDP v2

Wiegand 26/34/37

TCP/IP

REST API

MQTT

USB HID

Android SDK

4G LTE

802.11ac WiFi



Your system, our biometrics. Palmki respects your existing investment and only adds the biometric layer. No vendor lock-in, no full platform migration.



Next to an existing intercom, on an outdoor entrance or at an interior door — Palmki fits into the existing set-up.

RETURN ON INVESTMENT

The business value of Palmki 2.0

 COST SAVINGS**€15–30***

Saved per badge per year

In badge-free set-ups: no more badge creation, management, reprinting or replacement.

Fewer

Helpdesk tickets

No forgotten PINs, blocked badges or lost cards. Fewer IT interventions, lower management costs.

Personal

Non-transferable access

A palm cannot be shared, lent or stolen like a badge or code — removing a common cause of unauthorised access.

 OPERATIONAL BENEFITS**<1 s**

Faster throughput

Access in under one second, versus typically 3–5 seconds with a badge — no searching for cards at the door.

24/7

Seamless time registration

Check-in and check-out happen automatically at access. No separate time terminals or extra actions needed.



Audit-ready

Full audit trail and access reports generated automatically, with documentation support for GDPR compliance.

**Indicative payback period: 12–18 months***Based on eliminated badge and management costs and time savings at access. Request a custom ROI analysis at www.palmki.eu/#contact

* Indicative figures for illustration only, based on typical installations. Actual results depend on the specific situation and configuration and are not guaranteed.

