



# The Future of Contactless Biometric Security

Nuveq Embedded Palm Vein  
Recognition Terminal (EP-100PV)

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Secure. Contactless. Intelligent.





# The Invisible Key:

## Internal & Unfakeable

Unlike fingerprints or facial features which are external and copyable, palm vein patterns are hidden beneath the skin. This internal structure makes them virtually impossible to replicate or steal.



**Internal & Unique:** Identification is based on the complex blood vessel network inside the palm.



**Unforgeable:** Subcutaneous patterns effectively protect user privacy and make replication extremely difficult.



**Liveness Detection:** Infrared sensing prevents fake or reproduced biometric attacks (spoofing).





# Intelligent Engineering on a Linux Core

## Linux Operating System

Stable, enterprise-grade architecture  
for continuous operation.

## Infrared Imaging & Optical Sensing

Multi-spectrum scanning to  
penetrate the skin surface.

## Integrated Molding

Durable ABS Structure designed  
for embedded installation.

## AI Recognition Algorithm

Self-developed proprietary logic  
for precision mapping.





# Intelligent Edge Processing

## Operating System

Robust Linux-based architecture

## Storage Capacity

**100,000** Event Logs

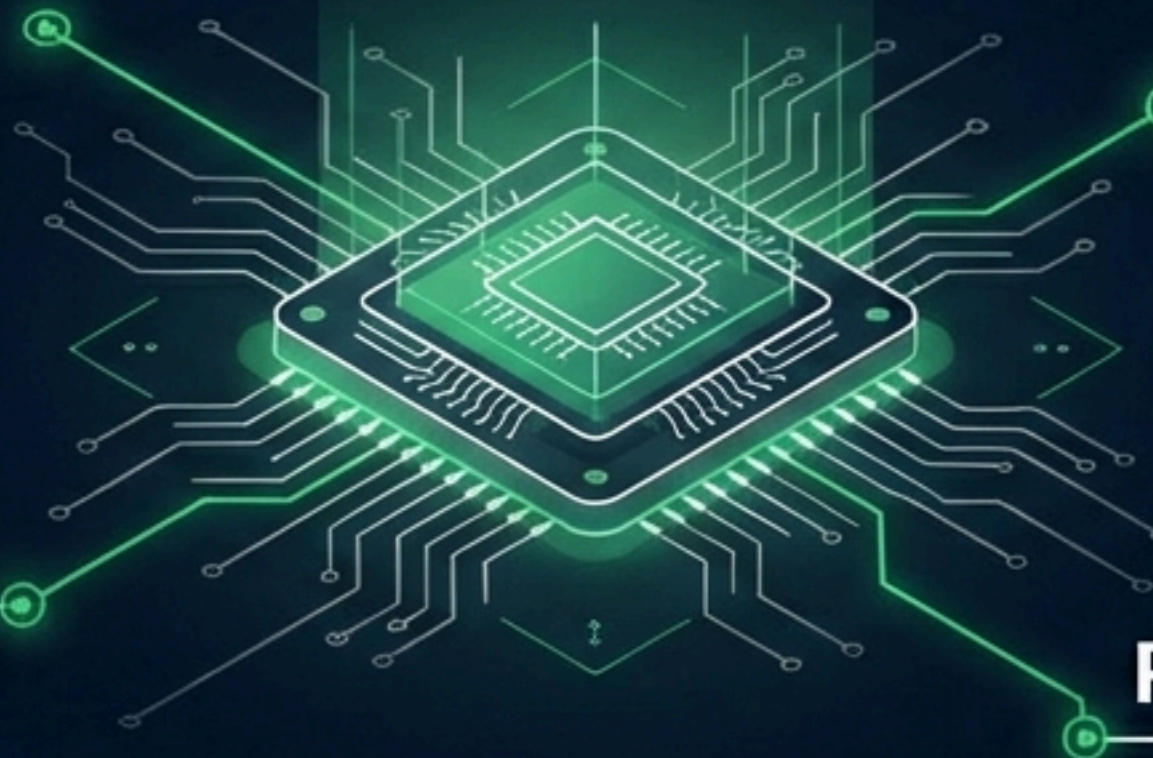
**10,000** User Templates

## Operating Range

**-20°C to 60°C** (Operation)

## Reliability

Watchdog functions to prevent freezing





# High-Precision Authentication in Milliseconds

**< 0.5s**

## Recognition Speed

Instant access for high-traffic flow.

**< 0.00001%**

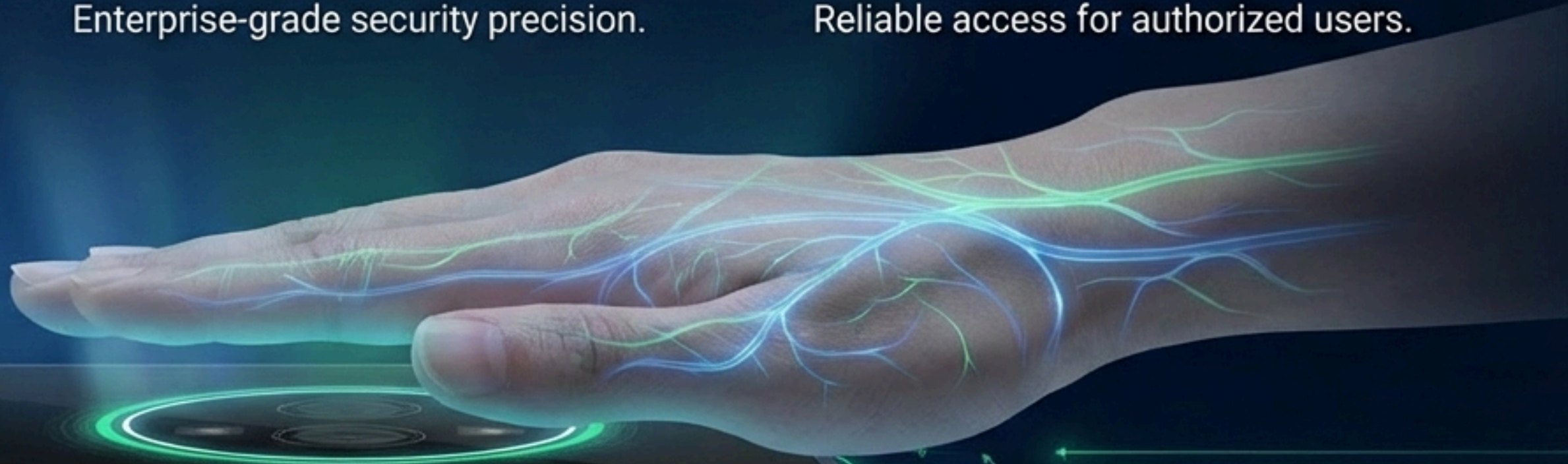
## False Acceptance Rate (FAR)

Enterprise-grade security precision.

**< 0.4%**

## False Rejection Rate (FRR)

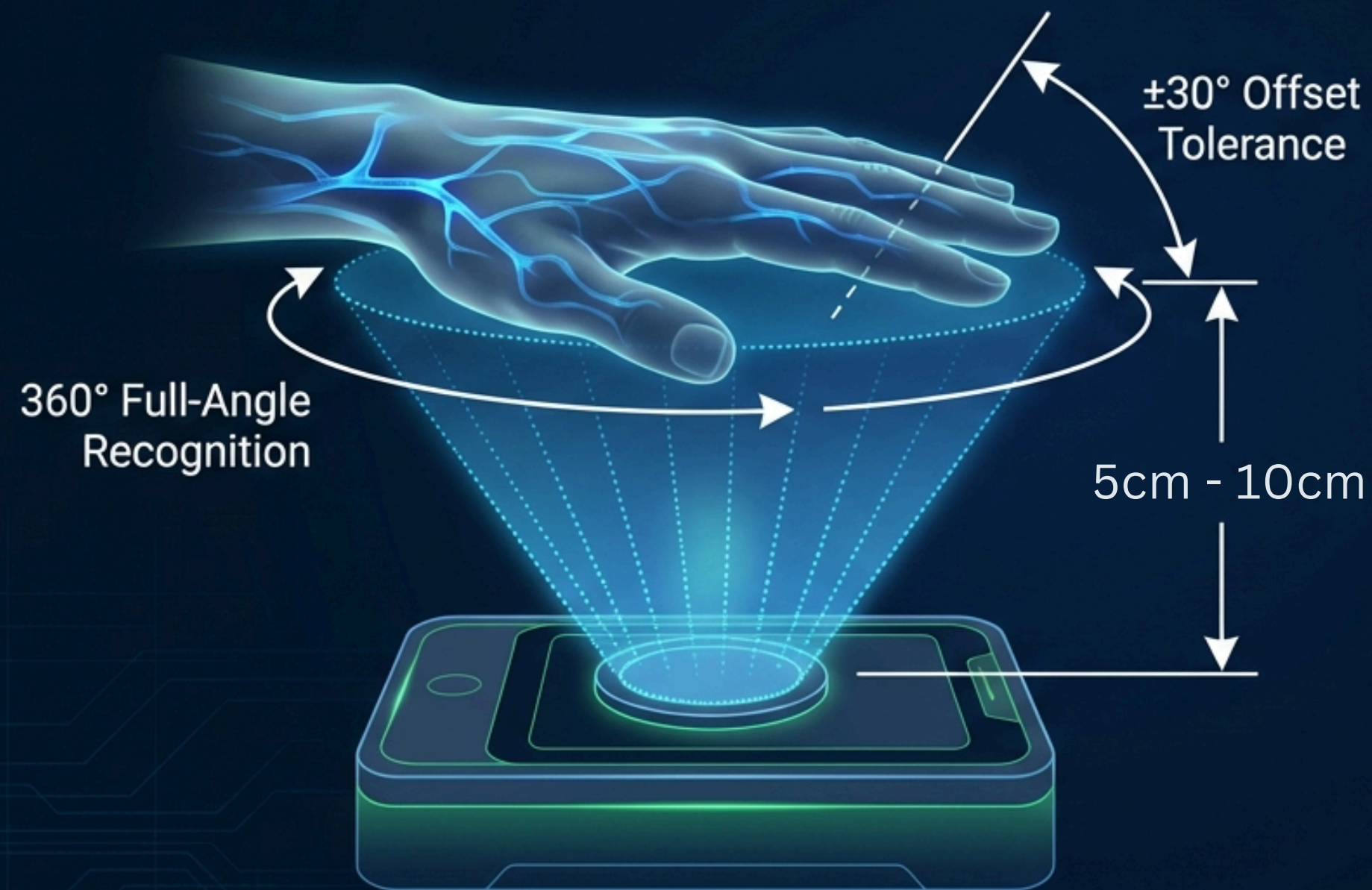
Reliable access for authorized users.





# A Frictionless User Experience

Forgiving tolerances for natural interaction.



- **Non-Contact & Hygienic:** Users do not need to touch the surface, reducing germ transmission.
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# Uncompromising Performance in Any Environment



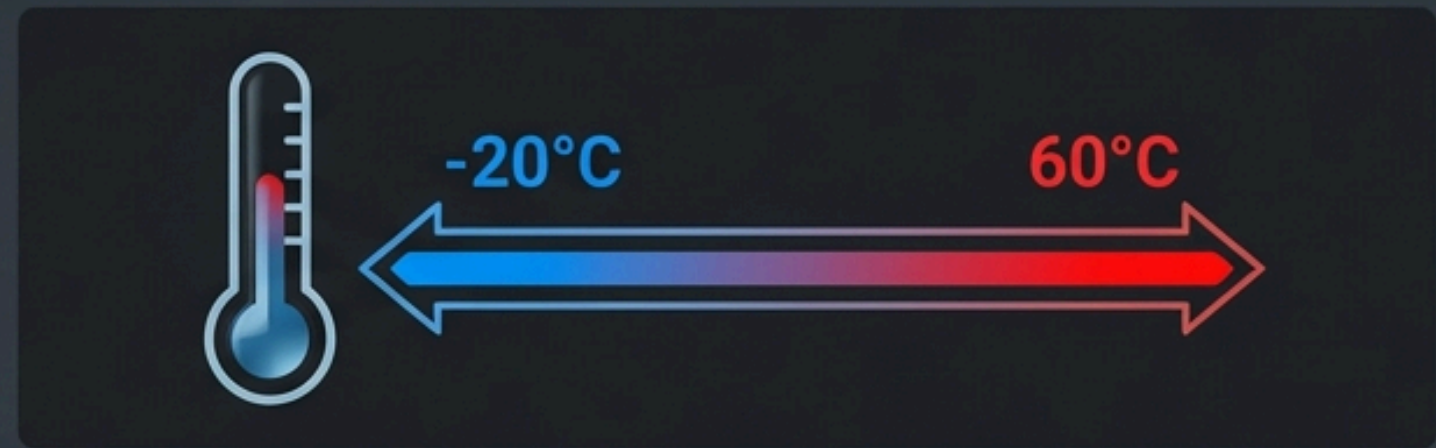
**Water Mist Tolerance:** maintains recognition even when the camera lens is obscured by condensation or mist.



**Wet Hand Operation:** Hygiene-friendly performance that isn't disrupted by water on the skin.



**Backlight / Strong Light:** Instant recognition in direct sunlight or high-contrast lighting conditions.

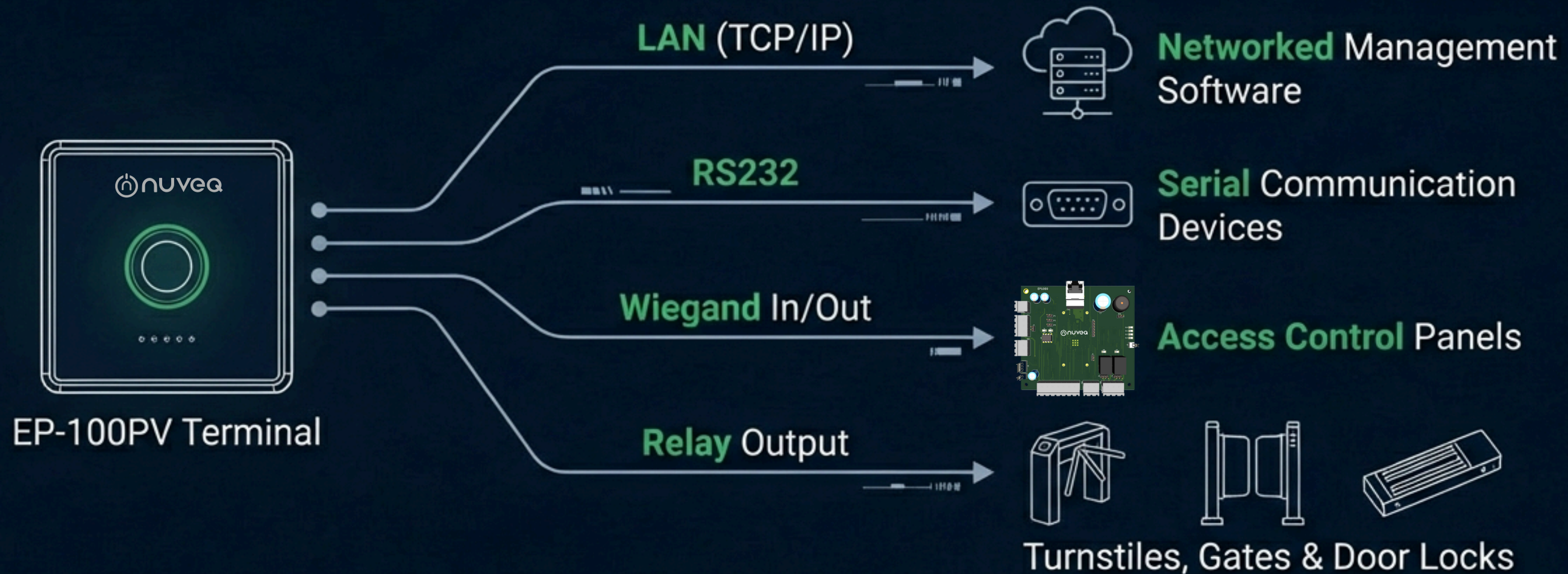


**Extreme Temperatures:** Reliable operation from -20°C to 60°C.



# Seamless System Integration

Flexible connectivity for diverse security ecosystems.





# Designed for Critical Access Points



## Government & Defense

Customs, Immigration  
Checkpoints, and Border  
Defense facilities.



## Commercial Infrastructure

Smart Office Buildings,  
Logistics Hubs, and Ports.



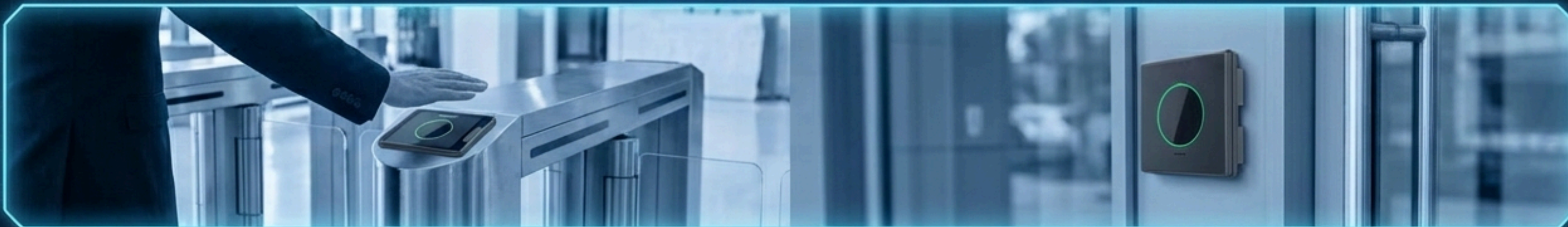
## Residential

High-end Communities,  
Gated Zones, and VIP areas.



## Hardware Integration

Compatible with Turnstiles,  
Speed Gates, Kiosks, and  
Wall-mounts.





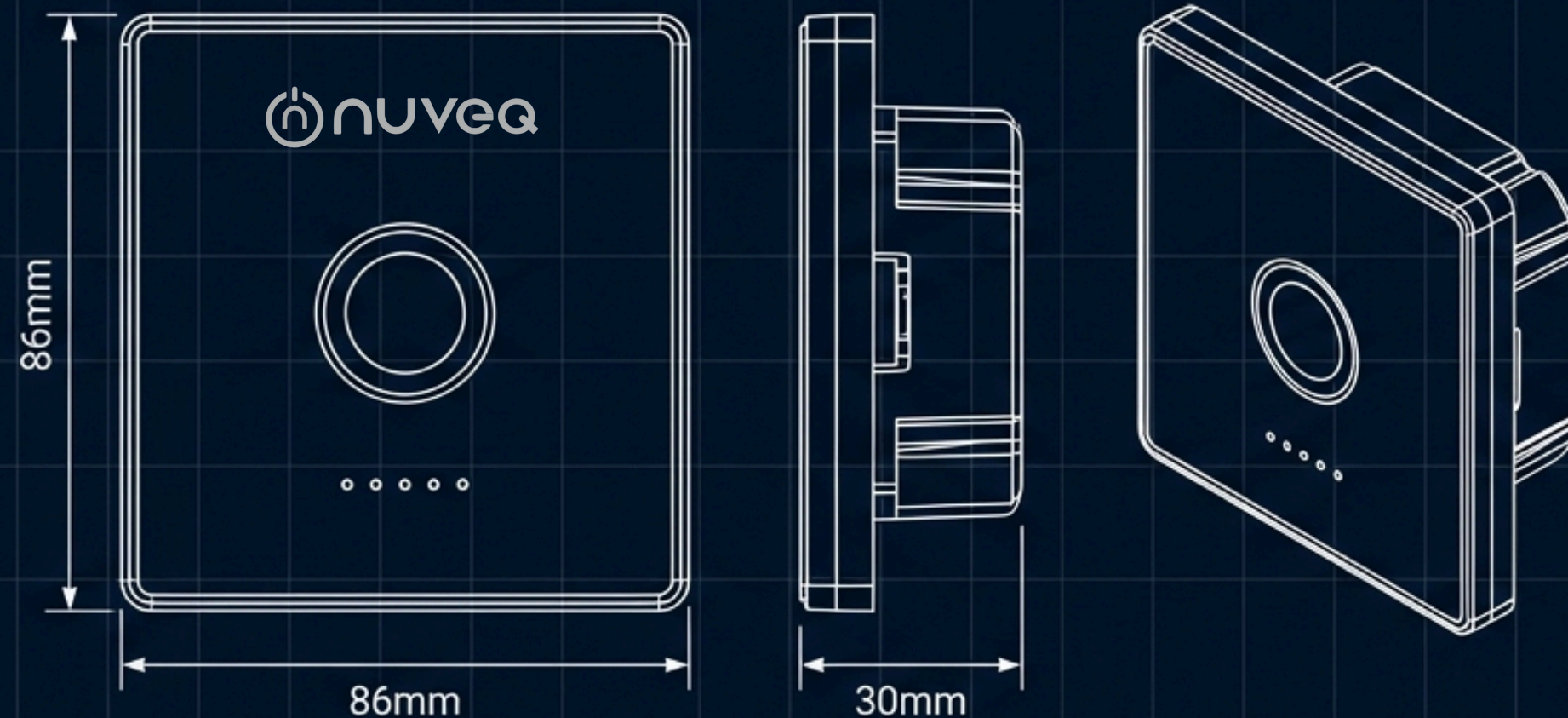
# Technical Specifications

Model No	EP-100PV
Palm Vein Capacity	10,000 Templates
Log Storage	100,000 Records
Operating System	Linux
Recognition Accuracy	FAR <0.0001% / FRR <0.4%
Communication	LAN, RS232, Wiegand In/Out, Relay Output
Operating Voltage	DC12V / 2A
Working Environment	Indoor / Outdoor (shelter)
Temperature / Humidity	-20~60°C / 10~95% (No freeze)
Dimensions	86 * 86 * 30mm





# Compact, Embedded Design



- **Build Material:** Integrated Molding, Durable ABS Structure
- **Installation:** Embedded installation for flush finish, Wall Mounting, or Mounting Box
- **Standard:** Fits standard architectural integration requirements



# Secure Your Future Operations

Take the first step towards a more secure and efficient access control system.

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