

1Kosmos Presentation Attack Detection Level 2 (PAD2)

The 1Kosmos application was tested by iBeta to the ISO 30107-3 Biometric Presentation Attack Detection Standard and was found to be in compliance with Level 2

Biometric authentication is becoming increasingly prevalent, but its security hinges on the ability to distinguish between a live person and a presentation attack (like a spoof). Recent Level 2 Presentation Attack Detection (PAD) testing conducted by iBeta Quality Assurance confirms that the 1Kosmos platform excels at this critical task.

iBeta: The Gold Standard in Biometric Testing

iBeta Quality Assurance is a globally recognized, independent third-party testing and certification organization. Accredited by NIST/NVLAP (NVLAP Lab Code: 200962), iBeta rigorously assesses biometric solutions against industry standards like ISO/IEC 30107-3, ensuring that they meet stringent security and performance requirements. Their PAD testing evaluates a system's ability to detect and prevent presentation attacks.

The Testing Process

iBeta put the 1Kosmos platform to the test on both a Google Pixel 8 (Android 14) and an Apple iPhone 16 (iOS 18.0). The testing simulated real-world scenarios, enrolling six individuals who then authenticated five times each. To challenge the system, iBeta employed five different Level 2 presentation attacks, representing mid-level spoofing techniques. The system was given a maximum of 24 hours to detect each PAD. The tests also verified that the application was still able to recognize the genuine subject.

Perfect Score: A Testament to Robust Security

The results speak for themselves: over 600 transaction attempts, iBeta was unable to breach 1Kosmos defenses. The platform achieved a remarkable 0% Imposter Attack Presentation Accept Rate (IAPAR). This perfect score signifies that 1Kosmos successfully blocked every presentation attack, demonstrating its exceptional ability to prevent unauthorized access. Furthermore, the bona fide False Non-Match Rate (FNMR) was calculated.

Key Takeaways

1Kosmos has officially been certified compliant with ISO 30107-3 Biometric Presentation Attack Detection Standard at Level 2. This achievement underscores the 1Kosmos commitment to providing secure and reliable biometric authentication solutions. By achieving a perfect score in independent, rigorous testing, 1Kosmos proves its ability to confidently protect against presentation attacks in real-world scenarios.



Passive Liveness Check

Reliable, fast and proven presentation attack detection.



Real Person



Hi-res paper photo



Paper Mask



Hi-res digital photo



Silicone Mask



Liveness Check
Passed



Liveness Check
Failed

About 1Kosmos

1Kosmos enables remote identity verification and passwordless multi-factor authentication for workers, customers and residents to securely transact with digital services. By unifying identity proofing, credential verification and strong authentication, the 1Kosmos platform prevents identity impersonation, account takeover and fraud while delivering frictionless user experiences and preserving the privacy of users' personal information. 1Kosmos performs millions of authentications daily for government agencies and some of the largest banks, telecommunications, higher education, and healthcare organizations in the world.

