Securing Cryptocurrency Platforms with Biometric Authentication: A Zero-Trust, Passwordless Approach

Securing Crypto with Trusted Identity

The explosive growth of crypto and digital asset platforms has introduced serious identity and access management risks. From DeFi and NFT marketplaces to wallets and exchanges, attackers increasingly exploit weak authentication and synthetic identities to commit fraud, launder funds, or hijack high-value accounts.

- **Over $2.9 billion** in crypto was lost to fraud in 2023

- **88%** of all 2023 deepfake fraud cases were in **crypto**

- **66%** of breaches in blockchain platforms involve compromised credentials

- Over **30 million wallets** were compromised 2023-2024

- North Korean hackers steal **$659M in crypto** in 2024

- **57%** of exchanges have been impacted by **deepfakes**

authID delivers the next generation of crypto identity: a privacy-first biometric solution that eliminates passwords, prevents account takeovers, and ensures real users, not bots or deepfakes, are behind every transaction.

The Challenge: Crypto Security in a High-Stakes, High-Threat Environment

Cryptocurrency exchanges, wallets, and DeFi platforms face relentless attacks from sophisticated cybercriminals seeking to exploit weak authentication, steal assets, and compromise user trust. Traditional methods such as passwords, SMS OTPs, and hardware tokens are increasingly vulnerable to phishing, SIM swapping, and credential theft. Regulatory scrutiny, operational risk, and the need for seamless user experiences further heighten the stakes.

Key Challenges:

- High risk of account takeover, SIM swap, and phishing attacks
- Loss of assets due to compromised credentials or insider threats
- Regulatory requirements for strong customer authentication and auditability
- User friction and abandonment from complex authentication processes

authID Solution: Privacy-First, Passwordless Biometric Authentication for Crypto

authID delivers a robust, privacy-centric biometric authentication platform tailored to the unique needs of crypto wallets, DeFi, and exchanges. By eliminating passwords and legacy MFA, authID empowers platforms to secure onboarding, access, and transactions while safeguarding user privacy and delivering a frictionless experience.

How It Works:

User Onboarding: New users are verified through facial biometrics and government-issued ID validation, creating a biometric root of trust without storing biometric data.

Passwordless Login & Wallet Access: Returning users authenticate with a selfie, no passwords, no OTPs, no hardware devices. This applies to both custodial and non-custodial wallets.

Transaction Authorization: Biometric step-up authentication for high-value withdrawals, trades, or wallet transfers.

PrivacyKey™ Architecture: No biometric data is stored; authentication leverages public-private key cryptography, supporting regulatory alignment and user privacy.

Device Independence: Authenticate from any device, mobile, desktop, or hardware wallet interfaces with no app to download.

Features

- **Privacy-First Authentication:** authID never stores biometric data. All biometric processing is ephemeral, supporting global privacy regulations and user trust.

- **No PII or Wallet Data Stored:** Personal information and wallet credentials are never retained by authID, reducing risk and aligning with privacy expectations in the crypto community.

- **Passwordless, Phishing-Resistant:** No passwords, PINs, or SMS codes to steal or phish, just a selfie.

- **Biometric Identity Proofing:** Secure onboarding with government ID and facial biometrics, preventing fake or synthetic accounts.

- **Deepfake & Spoofing Defense:** Multi-layered protection against deepfakes, printouts, and screen replays.

- **Device Independence:** Authenticate from any device, mobile, desktop, or shared terminals with no app to download.

- **Lightning-Fast:** Sub-25ms authentication for instant wallet access and transaction approval.

- **Seamless Integration:** Easily integrates with crypto exchange, wallet, and DeFi platforms via API and customizable UI.

- **Comprehensive Audit Trails:** Immutable logs for regulatory compliance and forensic investigation without compromising user privacy.

Securing Cryptocurrency Platforms with Biometric Authentication: A Zero-Trust, Passwordless Approach

Key Benefits

Fraud Prevention & Privacy-First Compliance

- Stop impersonators and synthetic fraud with **live biometric verification** that never stores user data. Supports **GDPR, FATF, BIPA, CCPA** and **PSD2** and more while supporting **pseudonymity and user anonymity** in decentralized environments by verifying real users without revealing personal identity details.

Wallet Security Reinvented

- Protect hot and cold wallets with **live identity challenges**. No seed phrases, no PINs, just your verified face. Prevent unauthorized transfers or wallet / account takeovers, and enable account recovery.

Frustration-Free UX

- Frictionless onboarding and fast authentication across dApps, exchanges, and DeFi platforms improves **conversion**, **retention**, and user trust.

Secure Governance & DAO Voting

- Know every wallet in your DAO belongs to a real person. Add biometric verification to **governance participation**, preventing Sybil attacks and bot voting.

authID in Action

authID delivers measurable impact for Web3 security with an industry-leading **false match rate of 1 in 1 billion** and **biometric verification in just 700 milliseconds**. By storing **zero biometric data**, the solution ensures **100% privacy preservation** while maintaining regulatory compliance. Organizations see a **45–60% reduction in account recovery tickets**, and every identity event is backed by a **full cryptographic audit trail** to meet global compliance and reporting requirements.

authID streamlines **KYC onboarding**, protects **wallet access and recovery**, and prevents fraud during **high-risk actions** like token transfers, smart contract executions, or asset withdrawals. It integrates across Web3 ecosystems, whether in-browser wallets, mobile apps, or cold storage platforms.

About authID

authID (Nasdaq: AUID) ensures enterprises "Know Who's Behind the Device" for every customer or employee login and transaction, through its easy-to-integrate, patented, biometric identity platform. authID quickly and accurately verifies a user's identity, eliminates any assumption of 'who' is behind a device to prevent cybercriminals from taking over accounts. By creating a biometric root of trust for each user, authID stops fraud at onboarding, detects and stops deepfakes, eliminates password risks and costs, and provides the fastest, most frictionless, most accurate, and most compliant user identity experience demanded by operators of today's digital ecosystems.