

Darkpaper
Payond Cryo (Sqrow Keep)
Ultra-cold storage 3D-wallet

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1. Introduction

Cryptocurrencies occupy a substantial and rapidly growing segment of the global financial system, with their secure and safe storage being of paramount importance to every user.

Hence, the teams at Payond and Sqrow Labs have collaborated to develop the Payond Cryo application. Payond Cryo is an innovative crypto wallet designed to provide secure and reliable ultra-cold storage (with the SplitKeys option) for cryptocurrencies and assets. This document offers a detailed overview of the technology, security measures, and features of Payond Cryo.

1.1. Purpose and Scope

The goal of Payond Cryo is to offer a secure and reliable means of storing and managing cryptocurrency assets. This wallet caters to the needs of diverse target audiences, ranging from experienced investors to newcomers in the cryptocurrency world.

2. Ultra-Cold storage technology

2.1. Operating principles

Payond Cryo is based on the concept of ultra-cold storage, implying the isolation of assets from the internet and network connections. This is achieved by employing two devices (such as a tablet and a smartphone): one for initiating transactions and the other for securely storing security keys. The absence of network connections on the second device ensures complete isolation of assets from online threats.

2.2. Security and cryptography

A key component of Payond Cryo's security is its post-quantum cryptographic protection.

Cryptographic methods provide:

- **Data encryption:** All data stored on Payond Cryo devices is encrypted using robust post-quantum encryption algorithms, rendering them practically inaccessible to malicious actors.

- **Multifaceted authentication methods:** Payond Cryo utilizes biometric and multifactor authentication (including Sqrow bKYC/bAUTH) – only legitimate owners can access the assets.
- **Smart contracts for secure transactions:** Payond Cryo integrates smart contracts, ensuring secure and reliable transactions that guarantee compliance with rules and restrictions.

3. Features of Payond Cryo

Payond Cryo boasts a range of innovative features that position it as a top-tier ultra-cold storage crypto wallet.

- ★ **Dual Device functionality** - One of the key features of Payond Cryo is its dual-device setup. The essence lies in using two devices: one for initiating transactions and the other for storing security keys. This approach elevates security to a new level – even if one device is compromised, access to assets is impossible without the second device.

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- ★ **Network isolation** - The second device used in Payond Cryo is completely isolated from network connections. Payond Cryo controls network functions, forcefully disabling all connections and switching the device to airplane mode. This prevents potential attacks through the internet, making Payond Cryo a reliable asset storage solution.
 - ★ **Dynamic QR codes** - All transactions in Payond Cryo are conducted by scanning dynamic QR codes. This secure and convenient transaction method has already proven itself. Dynamic QR codes change with each transaction, making them immune to interception or forgery.
 - ★ **3D currency visualization** - All currencies are presented in three-dimensional space, enhancing the visual management of assets. Users can view their cryptocurrencies as realistic 3D objects.
 - ★ **Simple transactions** - To streamline the transfer process, Payond Cryo offers intuitive methods, such as swiping from stack to stack. This makes transaction processing fast and easy to understand.

★ **Interface personalization** - Payond Cryo provides flexible interface settings. Users can choose wallet skins, modify color schemes, and control asset displays.

★ **SplitKeys Option** - To enhance security, Payond Cryo offers the SplitKeys option. Keys for asset management are stored on two different devices, preventing simultaneous access to the same key. The hot wallet does not store keys at all, providing an additional layer of security.

4. Security

Asset and Data Security is a Priority for Payond Cryo. In this section, we will delve into the measures taken to ensure user security.

4.1. Physical security of Payond Cryo:

- Protection against mechanical damage caused by impacts and device drops is ensured through internal backup mechanisms.

- Biometric authentication - Biometric authentication, such as fingerprint or facial recognition (including Sqrow bKYC/bAUTH), may be required to access assets.
- Protection against unauthorized access - Payond Cryo devices can automatically block access in the event of unauthorized intrusion attempts.

4.2. Encryption and data security of Payond Cryo:

- Encryption keys are stored in a secure repository and inaccessible to malicious actors.
- Idle encryption: Data remains encrypted even when idle, providing an additional layer of security during storage.

4.3. Transaction security of Payond Cryo:

- **Transaction signing:** Each transaction is signed using security keys, ensuring its authenticity.

- **Monitoring suspicious activity:** Payond Cryo monitors activity to detect suspicious actions and prevent attacks.
- **Multifactor authentication:** Multifactor authentication may be required to confirm transactions, further enhancing security.

5. Application and usage

In this section, we discuss how to use Payond Cryo and the actions users can take with this crypto wallet.

1. Installation and setup

Installing Payond Cryo is straightforward and intuitive. Users can download the application on their devices, after which they will be prompted to configure settings, including creating passwords and enhancing security.

2. Backup creation

The ability to create local backups of assets is a crucial part of secure cryptocurrency management, and Payond Cryo incorporates this feature. Copies should be stored securely and used to regain wallet access in case of device loss or damage.

3. Transaction initiation

Users can initiate transactions using the dual-device setup and dynamic QR codes. Simple transactions, facilitated by swiping, allow for cryptocurrency transfers without additional complex maneuvers.

4. Asset management

Payond Cryo provides users with convenient tools for asset management: balance tracking, portfolio management, and asset redistribution — all easily achievable through the simple, intuitive interface.

5. Access recovery

In the event of device loss or damage, users can regain access to their assets using backups and their secret keys.

6. Usage instructions

Payond Cryo provides detailed instructions to help wallet owners efficiently utilize the available functionality.

6. Appendix A: SplitKeys

The SplitKeys option in the Payond Cryo system enhances the security of cryptocurrency assets by using three devices with different functions:

- ★ **Hot Wallet (Device 1):** The device designed for initiating transactions. While providing convenience and speed, the hot wallet does not have full access to private keys.
- ★ **Ultra-Cold Wallet - Part 1 (Device 2):** The first part of the ultra-cold wallet that stores a portion of the security private keys. It is isolated from network connections and cannot initiate transactions.
- ★ **Ultra-Cold Wallet - Part 2 (Device 3):** The second part of the ultra-cold wallet. It also contains a portion of the security private keys and shares the same network isolation as the second device.

Principles and features of SplitKeys in Payond Cryo include:

★ **Splitting Keys between Two Ultra-Cold Devices:**

Private keys for managing cryptocurrency assets are divided between two ultra-cold devices (Device 2 and Device 3). Neither device has full access to the entire key list.

★ **Transaction confirmation:** Completing a transaction requires sequential confirmation from both ultra-cold devices. This means the transaction must be signed first on Device 2 and then on Device 3. This process adds an extra layer of security.

★ **Complete Network Isolation:** Both ultra-cold devices (Device 2 and Device 3) must be fully isolated from network connections. This ensures complete asset isolation from online threats and prevents potential internet-based attacks.

★ **Biometric and multifactor authentication:**

Authentication is required to access keys and sign transactions, ensuring that only legitimate owners can access assets. This may involve the use of biometric data and/or other multifactor methods (including Sqrow bKYC/bAUTH).

★ **Smart Contracts for secure transactions:** Ensures secure and reliable transactions by verifying signatures from both ultra-cold devices before completing the operation.

The SplitKeys option in Payond Cryo provides a high level of security and prevents asset compromise, even if one of the ultra-cold devices becomes vulnerable.

7. Conclusion

Payond Cryo is an innovative ultra-cold crypto wallet that ensures secure and reliable storage of cryptocurrencies and assets. Its unique features — dual-device functionality, network isolation, and dynamic QR codes — make it one of the most reliable solutions in the market.

7.1. Development perspectives and updates

In the rapidly evolving crypto solutions market, Payond Cryo is committed to continually improving its developments and products (including post-quantum cryptography methods).

At each development stage, we implement new technologies and innovative solutions to create competitive products.

7.2. Invitation to use and feedback

We invite users to appreciate the benefits of Payond Cryo and take advantage of this reliable ultra-cold crypto wallet.

We also value your feedback and are ready to consider your suggestions and recommendations to enhance our product: info@sqrow.com.