

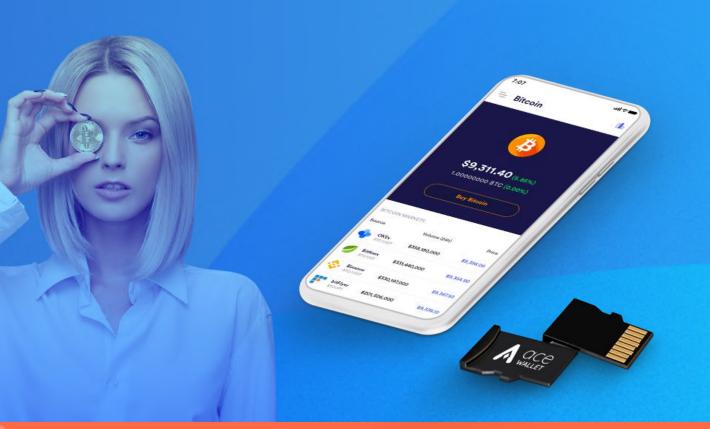
Android Hardware Wallet

## Use your mobile phone as a hardware wallet





A microSD Memory Card, Ace Card with an encryption and certified chip protects your blockchain money









#### About us

Over the last couple of years, we've seen several solutions that provide the ability to work with the crypto market segment through different cloud systems or external hardware for computers. Now we come to this market segment with the idea of implementing secure crypto-operations that can be run on mobile devices – without having to carry another device that safely stores data(like an additional USB key).

Our solution is integrated into a dedicated microSD card that includes a processor to encrypt and store data.

You no longer have to carry external readers with you and you are not limited to safe work only from your computer, but you can directly carry out crypto-operations from your mobile or tablet.

We needed to proof our idea, so we have passed the entire solution through a rigorous security audit and received the proper security certification for our solution.

The product is now in the final pre-sale phase and our energy is currently focusing on delivering Ace Cards and Ace Wallet Android app to our first customers.



In case that your electronic device storing sensitive data is infected, it is usually relatively easy to get to your blockchain access data. Don't save your sensitive data directly on your Android device. Use the Ace Card which protects your data and finances inside its secure chip.







#### microSD Ace Card Architecture

#### Secure chip

Data stored on the Ace Card is protected while sitting on a certified secure chip(a hardware with temper-resistant security), that saves sensitive credentials for access to the blockchain in a secure spot that is not publicly accessible. All of this data is transmitted over a secured communication protocol and can only communicate with the respective Ace Wallet app.



#### Common storage

The Ace Card also provides a common storage. The storage is available for the user and can be utilized in the same way as with any standard microSD Memory Card. However, no sensitive data is stored here. That data is stored happens in a special, secure part of the microSD card which can only be accessed by the Ace Wallet app via two step authentification.

#### **Encrypted communicationsing**

The mobile device communicates with the Ace Card a specially developed protocol. The whole communication is encrypted and password protected by the Ace Card owner. This communication cannot be captured by a "man-in-the-middle attack" and only the Ace Wallet can communicate with the secure chip of the Ace card.

No more external device that needs to be connected to your computer or phone to work with sensitive data and crypto. Use the Ace Cards solution and use your hardware wallet safely and directly on your mobile device.

#### microSD card specifications

Card type: SHDC

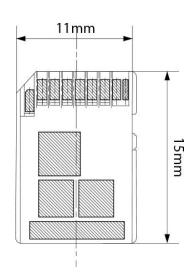
■ Interface: UHS-I (UHS50)

Speed class: 10

The dimensions of the Ace Card are the same as a standard microSD card.

#### Length x Width x Thickness

15 mm x 11 mm x 1 mm. The weight is about 1g. The operating temperature of the Ace Card is 0  $^{\circ}$  C – 70  $^{\circ}$  C.









## Screenshot from the Ace Wallet Android Application









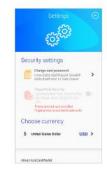


































### Ace Wallet Security



### Secure hardware chip

The Ace Card stores all your sensitive data on a secure chip that is completely separated from both the regular storage of the Ace Card and the regular storage of the Android device.



### **Two-factor Authentication**

A two-factor authentication protects your data by requesting a secondary password that is usually randomly generated on a separate device than the one that you are logging into.



### Fingerprint security

An added layer of security is available on devices that support fingerprint authentication.



## Auto erase function

Your sensitive data gets automatically and completely wiped in a case of your Ace Card getting stolen and/or an attacker somehow bypassing all the security features.



### Password authentication

Without the master password that only you, the owner knows, the sensitive data is safe and sound, inaccessible to anyone without the risk of triggering the auto-erase feature.



## Multiple wallets support

Bitcoin is currently our coin of choice but we plan to implement support for additional ones in the near future.



## Encrypted communication

Your sensitive data gets automatically and completely wiped in a case of your Ace Card getting stolen and/or an attacker somehow bypassing all the security features.









### Ace Card Hardware Certifications

### **Encryption certificates**

Technical examination (evaluation) of the secure chip according to the security criteria published by Federal Office for Information Security (BSI) or generally recognised security criteria.

Certificate: BSI-DSZ-CC-0857-V2-2015 Certificate: BSI-DSZ-CC-0633-V2-2014 Certificate: BSI-DSZ-CC-0858-V2-2015 Certificate: BSI-DSZ-CC-0750-V2-2014

Valid: 2020, April 26

#### **EMVCo**

#### Certification of Secure Element Hardware

EMVCo exists to facilitate worldwide interoperability and acceptance of secure payment transactions. It accomplishes this by managing and evolving the EMV® Specifications and related testing processes.

Certificate: ICCN: EMVCo IC Certificate Number

(chip HW): ICCN0149

Valid: 2016

#### **EMVCo**

#### Certification of Secure Element Software

Software approaches for online transactions that involve interaction with the card-issuing bank or network's web site, such as Verified by Visa and MasterCard SecureCode

Certificate: PCN0010 EMVCo Platform Certificate

(chip SW platform): PCN0010

Valid: 2016

#### VISA's

#### **Product Compliance Recognition**

For secure element chip (HW) and secure element OS (SW)

Certificate: MPNXPS0348A Valid: 2018, March 16

#### Mastercard® CCS

Component Conformity Statement

Certificate: SE/NXPS/1309/M02/MMPPMC4/ -A

Valid: 2016

#### Mastercard® TAS

Test Assessment Summary

Certificate: SE/NXPS/1309/M02/MMPPMC4/-

A-131015 Valid: 2016

#### Mastercard® CAST

Compliance Assessment & Security Testing MPCN

Certificate: MasterCard CAST (Compliance Assessment & Security Testing) MPCN

Valid: 2016

#### Mastercard® LoA

Letter of Approval

Ace Card is based on microSD card that was certified by Mastercard® as Mobile MasterCard™ PayPass® product in 2014

Certificate: MLOA-LOMO140601-140725)a)

Valid: 2016













### What is beneficial for you as a customer?

The Ace Card Wallet is a unique product for the crypto world that allows users that work with cryptocurrencies a new approach towards security directly from their mobile device. It's suitable as a loyalty or gift voucher for your partners and offers a very particular marketing and security tool for your business.

## **Benefits of Ace Card Wallet for partners**

- Personal branding on the Ace Card
- Optional Ace Box with your name
- Ability to distribute promotion and advertising materials for your customers directly on the microSD Ace Card.
- Custom-tailored crypto wallet
- Free dropshipping









