



# Crunchfish Digital Cash -100% payment availability for e-Wallets

An e-Wallet empowered by Digital Cash works even offline - regardless of connection issues, infrastructure failures or overloaded servers.

Digital Cash ensures 100% payment availability for e-Wallets. Have cash ready in your e-Wallet, to be used without an online connection. Digital Cash payments are independent from the net, offering instant payments fully offline, followed by settlement when either the payer or receiver goes online.



Crunchfish Digital Cash solution is firmly protected by the V-OS

## **Crunchfish Digital Cash**

Crunchfish Digital Cash solution divides digital payments into two sequential steps - an instant offline payment, followed by online settlement. The solution consists of three components -Digital Cash Wallet, Digital Cash Verifier and Digital Cash Account. The DC Wallet is integrated into an e-Wallet and runs as a Trusted Application in V-Key V-OS to provide the e-Wallet with offline capabilities. It secures that sufficient balance is available before an offline payment is generated. Balance is created by reserving a corresponding amount of money in the DC Account. Offline payments are transferred using proximity interaction, e.g. QR, Ultrasound or BLE. The receiver verifies the offline payment with the DC Verifier. The DC Account is debited in the online settlement step, when either party goes online.

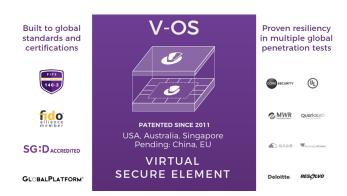


### About Crunchfish - crunchfish.com

Crunchfish AB is a fintech pioneer creating offline payment solutions. Crunchfish is listed on Nasdaq First North Growth Market since 2016, with headquarters in Malmö, Sweden.

Virtual Secure Element, a trusted execution environment where Digital Cash's cryptographic keys are securely stored, and where all credentials, transactions and logs can be safely kept away from the unsecure environment of mobile operating systems. V-Key's internationally-patented V-OS is the world's first Virtual Secure Element whose advanced cryptographic and cybersecurity protections comply with global standards (Common Criteria EAL 3+ rating and FIPS 140-2) previously reserved only for expensive hardware solutions. It has been rigorously stress-tested and used by many leading e-commerce players, government agencies, regulatory bodies and financial services companies.

**V-Key V-OS Virtual Secure Element** 



### About V-Key - v-key.com

V-Key is a software-based digital security company whose technology powers ultra-high-security solutions for digital identity management, user authentication and authorization.