



The Next Generation of Biometric Access Control

LEGIC Connect22

Zurich

What if things worked better?



- Do you control access to your premises or resources?
 - Post-COVID, investment in logical/remote access; how much investment in physical security?
 - Cost of unauthorised presence?
- Would you like your access control system to include:
 - Contactless 2-factor authentication
 - Biometrically locked access tokens
 - Easy GDPR compliance without any central databases of biometric data
 - Standard, off-the-shelf hardware and software (LEGIC, etc)
- What if this was possible without any changes in your existing system?

Introductions



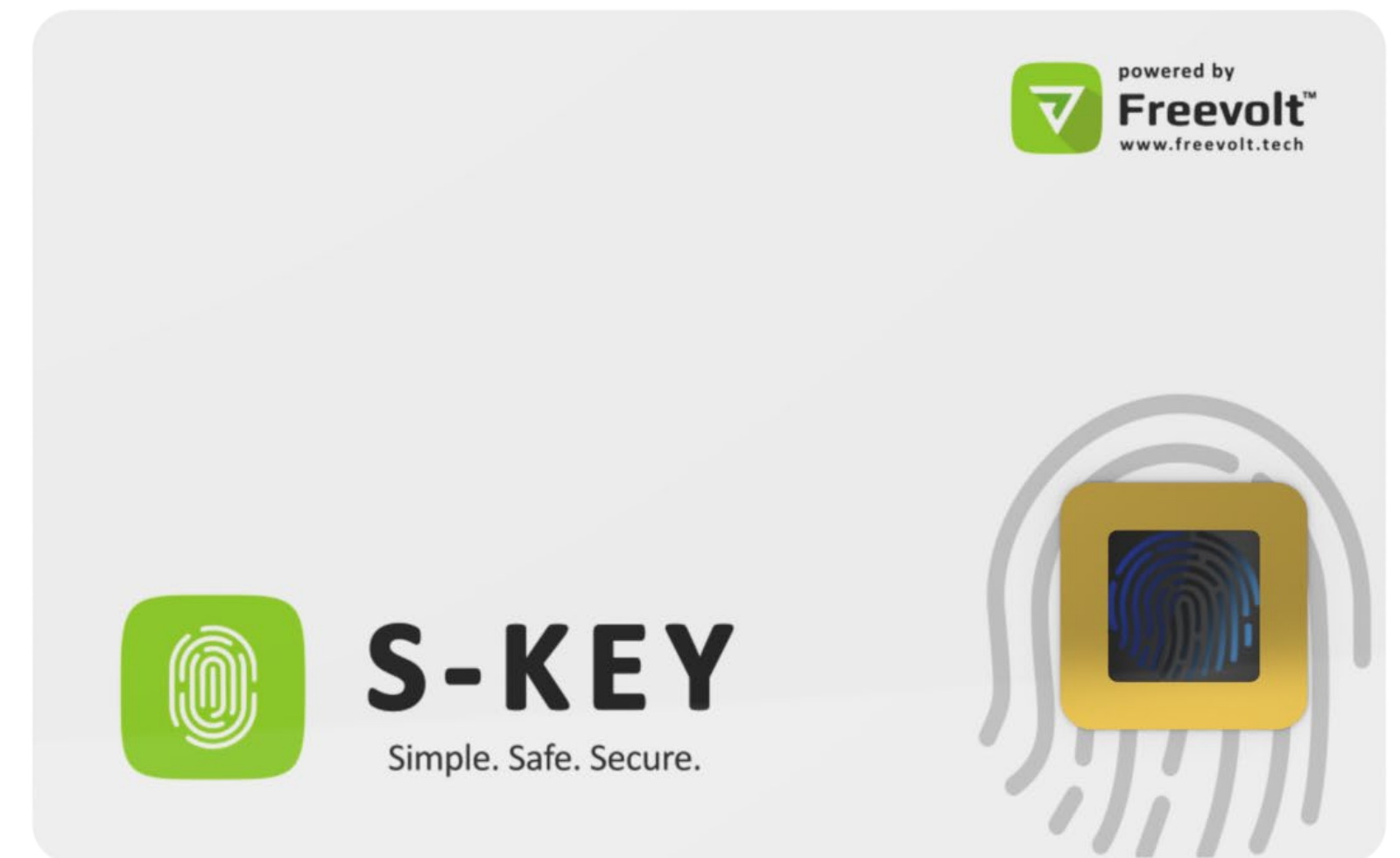
- Alison Lloyd, Head of Engineering at Freevolt Technologies Limited
 - Responsible for technology development and strategy, plus IP
 - Background in embedded firmware development
- Freevolt Technologies Limited is a small technology company based in London
 - Research and develop our own technologies
 - Manage our own supply and manufacturing chains
 - Also available for consulting
- S-Key: biometric access control card



What is S-Key?



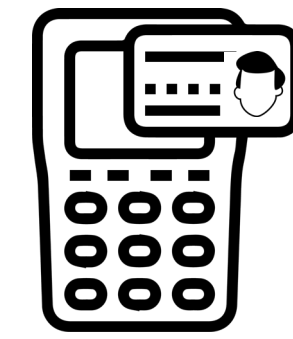
- Biometric access control card, replacing standard blank cards
- Fingerprint used to unlock access to onboard chip
- Incorporates standard NFC comms chip (LEGIC, etc)
- Works with existing NFC access control systems
- Biometric data securely stored only on the card –
 - GDPR compliant
- No battery – extended life, easier WEEE disposal



S-Key biometric access control card



Maintaining 2FA:



Scan



Biometric Validation

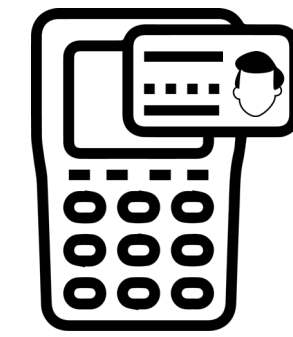


Access Granted



3-Factor Authentication:

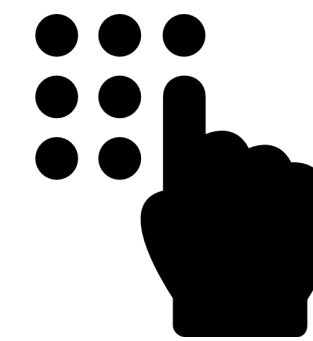
Something you have
Something you are
Something you know



Scan



Biometric Validation



Enter Pin



Access Granted

Key Advantages:

- **Tighter Control:** Maintain 2-Factor Authentication, with additional security layer possible (3FA)
- **Removes Threat from Card Loss:** Only named individual can use the card to gain access
- **Scalable & Easy to Adopt:** Works with existing access control systems, no changes required
- **Better Privacy & GDPR Compliance:** Fingerprint hash encrypted and stored on the card (never leaves the card)
- **Improved Hygiene:** Secure, contactless entry now possible post COVID-19 pandemic

The technology behind S-Key: Freevolt



- No regulatory or infrastructure changes - works with existing card technologies
- No recharging or changing batteries: it works whenever you position it next to a card reader (mobiles, card reader, etc.)
- Uses standard components and manufacturing techniques
- Fits into existing card footprint and thickness
- Enables better security and UX/speed
- Proprietary technology with multiple patents filed / granted

More Power = More Security



Existing smart devices, such as your smartphone or a card reader, can **power your smartcard**

Finally...



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- S-Key is available NOW
 - Purchase an evaluation card via our website <https://www.freevolt.tech> or contact info@freevolt.tech
 - Come and see a live demonstration at our Connect22 booth
 - Ask me about engineering consulting or collaboration



Questions?
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