

Access Credentials Timeline

PROS

Cheaper and simpler than managing keys, magstripe card are suitable only for basic low-security applications (like your frozen yogurt rewards card).

Prox cards are the least expensive and most common contactless card credential.

Contactless smart cards are more secure due to open standards and encryption. They offer much greater functionality and on-card storage.

Secure smartcard credentials provide reliable AES 128 encryption. Mobile credentials are also highly encrypted and secure. Biometric credentials are no-cost and impossible to lose.

CONS

Magstripe credentials have been mostly eliminated as an access control credential technology. Besides offering minimal data storage, they use unsecure technology and can easily be copied like keys.

Prox cards are an unsecure technology, offering no encryption. Card data can be collected and cloned using a readily available card copier without the cardholder's knowledge or permission.

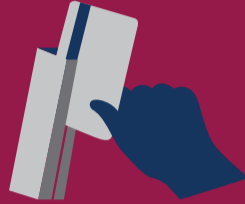
First-generation legacy smartcards have been compromised and are vulnerable to cloning. An upgrade to next-generation secure credentials is required to maintain proper security

Biometric and mobile-enabled readers are more expensive. Although biometric readers are completely private and secure, privacy is a concern when biometric templates are stored on the reader.

1960s-1990s

MAGSTRIPE CREDENTIALS

Legacy magnetic strip swipe technology



1970s-
Early 1990s

PROXIMITY CREDENTIALS

Unencrypted 125 KHz low-frequency technology



Late 1990s-
2000s

SMARTCARD CREDENTIALS

13.56 MHz with first-generation encryption technology



TODAY

SECURE SMARTCARD, MOBILE AND BIOMETRIC CREDENTIALS

Multi-technology readers that include Bluetooth, NFC and biometrics

