Pass

Public Key Cryptographic Access Cards



- Cryptographic access credentials that cannot be compromised
- State-of-the-art high-strength public key cryptography
- Adds cryptographic security to any physical access system
- No X.509 certificates or complex public key infrastructure
- Simple utilities enroll into popular access control software

iPass public key access cards are state-of-the-art "NoPKI" cryptographic smart cards, which together with iPass multi-technology access readers deliver secure access credentials that cannot be compromised, without the complexities of X.509 certificates and public key infrastructure.

iPass PKC public key cryptographic access cards, unlike symmetric-key cards, do not contain a secret key which if leaked invalidates all cards and readers reliant on the key. iPass PKC access cards each contain a unique private key that never leaves the card, plus a matching public key that can be freely exposed with no security risk.

On reading an iPass PKC card, iPass readers retrieve the public key and send a random challenge to the card. The card encrypts the challenge with its private key and returns a response to the reader. The reader decrypts the response with the public key and compares it to the original challenge. If it matches the card is guaranteed not to be compromised.

iPass provides cross-platform utilities to enroll iPass PKC access cards into popular access control systems. Coupled with reader-hosted public key challenge-response this delivers a cryptographically secure physical access control solution without the complexities of X.509 certificates and public key infrastructure.

iPass PKC access cards, together with iPass MT access readers, seamlessly upgrade physical access control systems with strong cryptographic security. iPass PKC public key cryptographic access cards are available in contactless RFID only or dual interface contact/contactless versions.

	Pass (NC.	Change (Inc.)
Features	PKC-10*	PKC-20*
ISO/IEC-14443A RFID interface	yes	yes
ISO/IEC-7816 contact interface	no	yes
Contactless interface speed (max)	848 kbps	848 kbps
Contact interface speed (max)	-	344 kbps
Cryptography		
Public key algorithm	ECDSA P-256	ECDSA P-256
Challenge resonsed time (typ)	< 0.5 sec	< 0.5 sec
Specifications		
Dimensions (inches) WxHxD	3.375 x 2.125 x 0.3	3.375 x 2.125 x 0.3
Dimensions (mm) WxHxD	85.6 x 54.0 x 0.76	85.6 x 54.0 x 0.76
Card material	PVC	PVC
Card color	white	white
Recommended printing method	dye sublimation	dye sublimation
Contact interface voltage	-	3V
Contact interface current (peak)	-	200mA

^{*} Cards are plain white suitable for printing

