

PASSIVE SMART CARD TECHNOLOGY
IDENTIFICATION MEDIA
AND THEIR PROGRAMMING



SMART CARDS SMART TAGS

G1

G2

SimonsVoss has very recently introduced purely passive components in addition to its time-tested active technology and hybrid versions. These components can be addressed using smart cards or smart tags - MIFARE® Classic, MIFARE® Plus and MIFARE® DESFire. There is also the option of using existing cards in System 3060.



TECHNICAL SPECIFICATIONS

- ⚙ ISO 7816 format
- ⚙ White (unprinted)

PRODUCT VERSIONS

SMART CARD MIFARE® CLASSIC

1k memory, white; contains: 5 units	TRA.MIFARE1K.5
1k memory, white; contains: 100 units	TRA.MIFARE1K.100
4k memory, white; contains: 5 units	TRA.MIFARE4K.5
4k memory, white; contains: 100 units	TRA.MIFARE4K.100

SMART CARD MIFARE® DESFIRE (G2 ONLY)

2k memory, white; contains: 5 units	TRA.DESFIRE2K.5
2k memory, white; contains: 100 units	TRA.DESFIRE2K.100
4k memory, white; contains: 5 units	TRA.DESFIRE4K.5
4k memory, white; contains: 100 units	TRA.DESFIRE4K.100
8k memory, white; contains: 5 units	TRA.DESFIRE8K.5
8k memory, white; contains: 100 units	TRA.DESFIRE8K.100

SMART CARDS
SMART TAGS

SMART CARD MIFARE® PLUS (G2 ONLY)

Smart card MIFARE® Plus S, 2k memory, white; contains: 5 units	TRA.PLUSS2K.5
Smart card MIFARE® Plus S, 2k memory, white; contains: 100 units	TRA.PLUSS2K.100
Smart card MIFARE® Plus S, 4k memory, white; contains: 5 units	TRA.PLUSS4K.5
Smart card MIFARE® Plus S, 4k memory, white; contains: 100 units	TRA.PLUSS4K.100
Smart card MIFARE® Plus X, 2k memory, white; contains: 5 units	TRA.PLUSX2K.5
Smart card MIFARE® Plus X, 2k memory, white; contains: 100 units	TRA.PLUSX2K.100
Smart card MIFARE® Plus X, 4k memory, white; contains: 5 units	TRA.PLUSX4K.5
Smart card MIFARE® Plus X, 4k memory, white; contains: 100 units	TRA.PLUSX4K.100

SMART TAGS MIFARE® CLASSIC / DESFIRE

Smart tag MIFARE® Classic, 1k memory, black/white with SimonsVoss logo; contains: 5 units	TRA.TAG.MIFARE1K.5
Smart tag MIFARE® Classic, 1k memory, black/white with SimonsVoss logo; contains: 100 units	TRA.TAG.MIFARE1K.100
Smart tag MIFARE® Classic, 4k memory, black/white with SimonsVoss logo; contains: 5 units	TRA.TAG.MIFARE4K.5
Smart tag MIFARE® Classic, 4k memory, black/white with SimonsVoss logo; contains: 100 units	TRA.TAG.MIFARE4K.100
Smart tag MIFARE® DESFire, 2k memory, black/white with SimonsVoss logo; contains: 5 units	TRA.TAG.DESFIRE2K.5
Smart tag MIFARE® DESFire, 2k memory, black/white with SimonsVoss logo; contains: 100 units	TRA.TAG.DESFIRE2K.100
Smart tag MIFARE® DESFire, 4k memory, black/white with SimonsVoss logo; contains: 5 units	TRA.TAG.DESFIRE4K.5
Smart tag MIFARE® DESFire, 4k memory, black/white with SimonsVoss logo; contains: 100 units	TRA.TAG.DESFIRE4.100
Smart tag MIFARE® DESFire, 8k memory, black/white with SimonsVoss logo; contains: 5 units	TRA.TAG.DESFIRE8K.5
Smart tag MIFARE® DESFire, 8k memory, black/white with SimonsVoss logo; contains: 100 units	TRA.TAG.DESFIRE8K.100

MOBILE KEY

G2

With Mobile Key, SimonsVoss has developed an all-inclusive solution for using smart phones as digital keys based on near field communication (NFC) technology.

In this solution, smart phones can be used as freely programmable identification media. The data required for identification are transmitted into the phone in encrypted format via a GSM network, so that they can then be used to open SimonsVoss smart card lock media.

The Mobile Key application provides central administration of digital locking systems (digital smart card cylinders, Smart Handle digital door fittings, digital Smart Relay 2, Compact Reader). ID media (smart phones) are networked instead of locking components. Networking to the central administration software (LSM) is achieved via existing mobile networks.

The end user can retrieve their current key from the OTA server via mobile phone networks by pressing the 'Renew key' button on their Mobile Key app and entering a PIN. They can then use their smart phone to open all doors which the locking system administrator has authorised them to use. The smart phone acts like a MIFARE® card.

The locking system administrator needs to specify exact time slots when each user is authorised to gain access. After this time period, the user's 'key' expires and they need to download an updated key.

SYSTEM SPECIFICATIONS AND INTERDEPENDENCIES WITH OTHER PRODUCTS

- ⌘ LSM Basic, LSM Business or LSM Professional Editions, Version LSM 3.1 SP2 or higher
- ⌘ The 'NFC' module needs to be enabled in LSM
- ⌘ All SimonsVoss smart card products in G2 systems can be used together with NFC and MIFARE® Classic and/or transponders (NFC with MIFARE® DESFire in pipeline)
- ⌘ NFC-based smart phones

TECHNICAL SPECIFICATIONS

- ⌘ Card technologies: MIFARE® Classic; MIFARE® DESFire in pipeline
- ⌘ IPHONE4.ADAPTER.NFC:
iOS operating system + NFC adapter
- ⌘ MICROSD.SAMSUNG.S23.NFC:
Android operating system + Galaxy S2/3 with microSD
- ⌘ IPHONE5.ADAPTER.NFC:
iOS operating system + NFC adapter for iPhone 5
- ⌘ Security: End-to-end encryption between LSM and smart phone app (to be issued by locking system administrator)
- ⌘ Smart phone app: The Mobile Key app is used as a user interface and writes the card data into the secure element (SE = secure data memory)



MOBILE KEY

PRODUCT VERSIONS

IPHONE4® adapter

With NFC-technology and secure element to use smart card locking devices in conjunction with SimonsVoss app (free download from Apple App Store). The LSM.NFC module is required to use MOBILEKEY.NFC. The solution uses MIFARE® Classic technology (MIFARE® DESFire in pipeline).

IPHONE4.ADAPTER.NFC

IPHONE5® adapter

With NFC-technology and secure element to use smart card locking devices in conjunction with SimonsVoss app (free download from Apple App Store). The LSM.NFC module is required to use MOBILEKEY.NFC. The solution uses MIFARE® Classic technology (MIFARE® DESFire in pipeline).

IPHONE5.ADAPTER.NFC

Micro SD card for Samsung Galaxy SII and SIII

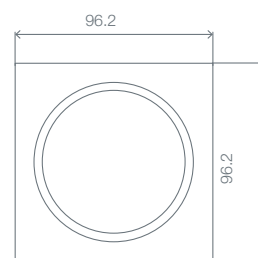
With NFC-technology and secure element to use smart card locking devices in conjunction with SimonsVoss app (free download at Google Play). The LSM.NFC module is required to use MOBILEKEY.NFC. The solution uses MIFARE® Classic technology (MIFARE® DESFire in pipeline).

MICROSD.SAMSUNG.S23.NFC

SMART READER 3078

G1

Smart Reader 3078 enables contactless MIFARE® Classic cards to be used in the System 3060. Access information is stored securely in a password-protected area of Classic cards. The card holder is only granted access if authorised.



Measurements indicated in mm

TECHNICAL SPECIFICATIONS

- ⚡ Silver or white ABS plastic housing
- ⚡ Dimensions: 96.2 x 96.2 x 14.4 mm (H x W x D)
- ⚡ Weight: about 102 g with battery
- ⚡ Protection rating: IP65 with battery; with power supply unit: IP54
- ⚡ Typical read range: up to 30 cm to the locking cylinder/ Smart Handle; up to 60 cm to Smart Relay
- ⚡ Battery type: 1 x AA, 3.6V, lithium
- ⚡ Battery life: up to 80,000 lock operations or up to ten years on standby
- ⚡ Temperature range: with battery: +6 °C to +60 °C; with power supply unit: -10 °C to +60 °C
- ⚡ LED indicates fault-free/incorrect operation
- ⚡ Yellow LED indicates Battery Warning Levels 1 and 2; the locking device is opened after a 10 or 20 second delay
- ⚡ The lock can still be opened with an authorised transponder even when the Smart Reader battery is completely flat
- ⚡ Cable-free surface mount (battery-operated version)
- ⚡ Option of connecting external antenna

PRODUCT VERSIONS

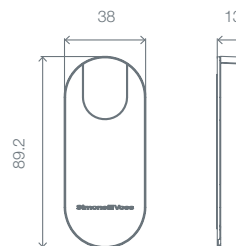
Smart Reader 3078 Battery-operated Smart Reader as converter from passive technology to SimonsVoss active technology for contactless MIFARE® Classic smart cards, in silver housing	TRA.NFC.MF1K.AP
Version in white housing	.W
Version with connection for external power supply unit	.NT
External antenna for connection to Smart Reader	WN.LN.ANTV
External plug-in power supply for Smart Reader	WN.POWER.SUPPLY.PPP

COMPACT READER 3078

G2

The Compact Reader allows any active System 3060 G2 locking component to be extended for use with MIFARE® Classic and MIFARE® DESFire smart cards.

Thanks to its very compact and attractive design, it can be attached to any door with either adhesive pads or two screws.



Measurements indicated in mm

TECHNICAL SPECIFICATIONS

- ⚡ Silver or white ASA plastic housing
- ⚡ Dimensions: 89.22 x 38.06 x 12.90 mm (H x W x D)
- ⚡ Weight: about 45 g with battery
- ⚡ Protection category version .WP: IP65 (only when bonded)
- ⚡ Supports MIFARE® Classic and MIFARE® DESFire media
- ⚡ Typical read range: up to 30 cm to the locking cylinder/
Smart Handle: up to 60 cm to Smart Relay
- ⚡ Battery type: 2 x CR2450, 3 V, lithium
- ⚡ Battery life: up to 80,000 actuations* or up to ten years on stand-by
- ⚡ Temperature range: -20 °C to +50 °C
- ⚡ Visual feedback signal from blue/red LED
- ⚡ Blue/red LED indicates Battery Warning Levels 1 and 2, locks are only activated after delays of varying length
- ⚡ Lock Node for direct networking of Compact Reader
- ⚡ 100 time zone groups
- ⚡ Up to 64,000 transponders can be managed per Compact Reader (depending on the locking system configuration)
- ⚡ Up to 32,000 locks can be managed per smart card (depending on available memory on the smart card and the locking system configuration)
- ⚡ The lock can still be opened with an authorised transponder even when the Compact Reader batteries are completely flat
- ⚡ Cable-free surface mount

*Up to 60,000 lock operations with access logging on the smart card

PRODUCT VERSIONS

Compact Reader 3078 To integrate all active G2 components in System 3060. Operated with contactless smart cards based on MIFARE® Classic and MIFARE® DESFire; in silver housing, for indoors	TRA.CR.MIFARE
Version in white housing	.W
Version for outdoor areas (weatherproof design)	.WP
“Network Inside” version with integrated Lock Node (cannot be retrofitted)	.WN
‘Network Inside’ version with integrated lock node for auto-configuration (cannot be retrofit)	.WNNM

PROGRAMMING

Programming Device SMARTCD.MP



There are different options for offline programming, depending on the lock system size:

- ⚡ Large systems are managed with the Locking System Management software (LSM). The lock plan is produced on a PC. The data are then transferred to the digital components using Programming Device Smart CD
- ⚡ Alternatively, lock plans can be transferred to a PDA (for hybrid components only)/netbook which communicates with the Smart CD using Bluetooth or USB.
- ⚡ Can also be programmed online; see Multi-networking.

TECHNICAL SPECIFICATIONS FOR SMART CD – G2

- ⚡ Housing made of dark-grey polyamide
- ⚡ Dimensions: 112 x 63 x 22 mm (H x W x D)
- ⚡ Protection rating: IP 20
- ⚡ Battery type: 2 rechargeable li-ion manganese batteries
- ⚡ Recharged via USB port
- ⚡ Temperature range: -5 °C to +40 °C

TECHNICAL SPECIFICATIONS FOR SMART CD.HF

For MIFARE® Classic and MIFARE® DESFire smart cards

- ⚡ Can only be used together with Smart CD – G2 to programme hybrid components

TECHNICAL SPECIFICATIONS FOR SMARTCD.MP

For SC cylinders, smart cards and smart tags

- ⚡ Housing made of dark-grey polyamide
- ⚡ Dimensions: 112 x 63 x 22 mm (HxWxD)
- ⚡ Protection rating: IP20
- ⚡ Power supply via USB port
- ⚡ Temperature range: -5 °C to +60 °C

PROGRAMMING

Programming device for MIFARE® Classic and MIFARE® DESFire smart cards



PRODUCT VERSIONS

PROGRAMMING DEVICES

<p>Programming device To connect to a USB port on a PC or laptop. Can also be operated online as a portable device with a netbook or touchbook To programme SimonsVoss SC locking devices and MIFARE® Classic, MIFARE® Plus and MIFARE® DESFire smart cards or smart tags</p>	SMARTCD.MP
<p>Programming device For MIFARE® Classic and MIFARE® DESFire smart cards and smart tags; can only be used in conjunction with SmartCD – G2</p>	SMARTCD.HF
<p>Programming device To connect to a USB port on a PC or laptop. Can be operated using Bluetooth on a Windows Mobile PDA (approved device: PDA.XX.DE) as a portable solution. Included in supply package: Programming Device Smart CD, CD ROM with manual and USB drivers, 2 integrated rechargeable batteries. Required software: a SimonsVoss lock plan software is always needed when used with a PC or laptop. LSM Mobile Edition is also required when used with a PDA. Programming Device SMARTCD.HF is also required when programming hybrid locking devices.</p>	SMART CD.G2
<p>Programming device For MIFARE® Classic smart cards and smart tags; is only required in conjunction with the Smart Reader 3078; cannot programme locks</p>	CD.MIFARE
<p>PDA (Subject to technical changes) with Windows Mobile operating system and Bluetooth technology; used in combination with SmartCD and LSM Mobile Edition as programming device for active and hybrid System 3060 components (SmartCD and LSM Mobile Edition are not included and must be ordered separately)</p>	PDA.XX.DE
<p>Netbook (Subject to technical changes) with Windows 7 Starter operating system; used in conjunction with Smart CD and LSM Mobile Edition as a programming device for System 3060 (SmartCD and LSM Mobile Edition are not included in the supplied package and must be ordered separately)</p>	NB.WM.ML