

A wide variety of credentials are available to suit Inner Range SIFER card readers. SIFER credentials are available in various form factors for use with physical and logical access control systems. All SIFER credentials use the highly secure MIFARE® DESFire® EV3 card format.

**Form factor types for SIFER credentials include:**

ISO Cards, Key Fobs, self-adhesive Tags/Coils and Wristbands.  
 Three ordering options are available for each form factor type.



**SIFER-P: Pre-programmed 'Stock' Credentials.**

SIFER-P credentials are pre-programmed with the Inner Range Global Encryption Key and can be used with standard SIFER Readers without any need for card or reader configuration. SIFER-P credentials are supplied with a pre-programmed site code and a card number that is guaranteed to be unique and are 'locked' to disallow re-programming in the field. SIFER-P credentials are supplied with the SIFER-P mark and are printed with the unique card number.

**SIFER-U: User-programmable Credentials.**

SIFER-U credentials have an identical set of specifications to that of SIFER-P with the major difference being that they can be reprogrammed in the field. By default SIFER-U credentials are shipped pre-programmed with the Inner Range SIFER Global Encryption Key and can be used with standard SIFER Readers without any need for card or reader configuration. Although SIFER-U credentials are supplied pre-programmed, the site code and encryption key can be re-programmed in the field using a SIFER card programming station. (It is not recommended to re-program SIFER-U card numbers as they are already unique)

When SIFER-U credentials have been re-programmed, the SIFER readers must also be re-configured to use the same encryption key. To perform the Reader configuration, a "Reader Configuration Card" must be produced using the SIFER card programming station. SIFER-U customisation is a process that is carried out by the installer and as such the unique encryption key must be stored and managed for safekeeping by the installer, this facilitates additional card batches at a future date. Where a unique SIFER-U encryption key has been lost it cannot be recovered.

**SIFER-U: Gold Card Service.**

As an alternative to the installer specifying their own custom encryption key, Inner Range offers a 'Gold Card' service, providing the installer with a unique Gold Key Configuration Card ("Gold Card"). The Gold Card delivers a guaranteed unique custom encryption key for use with the SIFER programming station and SIFER-U credentials. Inner Range assigns a unique encryption key from the reserved 'Gold Card' range. The encryption key is then associated with the customer's site to facilitate future card orders. The encryption key is securely stored within Inner Range where it cannot be viewed or shared. Being a reserved key, the key can never be manually entered using a SIFER programmer.

**SIFER-C: Custom Programmed Credentials & Reader Configuration Cards.**

The SIFER-C option allows installers to order reader configuration cards and user credentials from the factory with specific custom programming. SIFER-C allows the card number range, site code and encryption key to be programmed to order. SIFER-C card numbers are guaranteed to be unique and are 'locked' to disallow credential re-programming in the field. SIFER-C credentials are supplied with the SIFER-C mark and are printed with the unique card number. Where SIFER-C credentials are to be deployed the SIFER readers/keypads on the site must also be re-configured to use the matching encryption key. To accommodate this a Reader Configuration Card (994614CNF) is also required.

**ECOLITE: Budget-friendly, Less Secure..**

ECOLITE is a budget range of credentials that is compatible with Inner Range SIFER Readers, Integriti & Inception systems. These credentials are based on the MIFARE Ultralight EV1 technology which is a lower priced - lower security option compared to the standard DESFire EV3 technology used in our SIFER-P, SIFER-U & SIFER-C range of credentials.

## Ordering Options

Standard SIFER Credentials. All credentials are MIFARE® DESFire® EV3 4K - ECOLITE Cards are MIFARE Ultralight EV3 technology



**ISO Cards**  
 SIFER-P ISO Card **994610**  
 SIFER-U ISO Card **994612**  
 SIFER-C ISO Card **994614**  
 ECOLITE ISO Card **994580**



**Silicon Wrist Bands**  
 SIFER-P Wristband **994625P**  
 SIFER-U Wristband **994625U**  
 SIFER-C Wristband **994625C**

**Special Order Multi Application Cards & Fobs\***  
**994614A** Dual Application ISO card SIFER/Aperio  
**994614H** Dual Application ISO card SIFER/HID  
**994614AH** Tri Application ISO card SIFER/Aperio/HID



**Key Fobs**  
 SIFER-P Key Fob **994616**  
 SIFER-U Key Fob **994618**  
 SIFER-C Key Fob **994620**



**SIFER-U Gold Card**  
**994612G** for use with SIFER-U credentials

**994620A** Dual Application Key Fob SIFER/Aperio  
**994620H** Dual Application Key Fob SIFER/HID  
**994620AH** Tri Application Key Fob SIFER/Aperio/HID  
 \*All multi-application credentials must be based on MIFARE® DESFire® EV3 media (56 bit)



**Self Adhesive 20mm Coils**  
 SIFER-P Tag/Coil **994621P**  
 SIFER-U Tag/Coil **994621U**  
 SIFER-C Tag/Coil **994621C**



**SIFER Reader Configuration Card**  
**994614CNF** for use with SIFER-C credentials & SIFER readers and Keypad Readers



## Specifications

Operating Temperature:	-40° to 158° F (-40° to 70° C)
Operating Humidity:	5-95% non-condensing
RF Interface:	As suggested by ISO/IEC:15693 read/write, 14443B mode - 106 kbps
Typical Maximum Read Range:	R10 2.0-3.0" (5.0-7.6cm)
	R30/RW300 2.0-3.5" (5.0-8.9cm)
	R40/RW400 2.5-4.5" (6.3-11.4cm)
	RK40/RWK400 3.0-4.0" (7.6-10.1 cm)