

The Inner Range Mobile Access Reader is a combined Bluetooth enabled, IP67 rated Smart Card reader that supports both Bluetooth mobile technology and SIFER encrypted card formats for physical access control.

It is a multi-drop RS-485 based reader that employs 128 bit AES encryption from the card through to the door module, providing a far superior level of security than that of traditional Wiegand based card readers. These readers utilise the Mifare DESFire© EV1/EV2/EV3 card format. Mobile Access Readers also support reading the CSN of third party 13.56Mhz credentials

As these readers utilise a superset of the OSDP protocol, the readers may also be deployed on any system capable of using OSDP. These readers are connected to the RS-485 reader port for full Reader-In and Reader-Out operation of various Inner Range products as below:

- Integriti Access Controller (IAC) - Up to 16 Readers on-board
- Intelligent LAN Access Module (ILAM) - Up to 16 Readers
- Standard LAN Access Module (SLAM) -Up to 4 Readers
- Inception Controller - Up to 8 Readers on-board

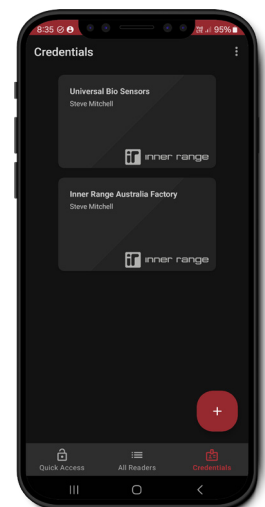
Mobile Access Readers are IP67 rated and available with site-specific encryption keys.

### Reader Features

- Secure 128bit AES Encryption
- Bluetooth enabled Reader
- Encrypted from Reader/Card through to Access Module
- Mifare DESFire© EV1/EV2/EV3 Card Format
- Water & Dust Resistant to IP67
- Vandal Resistant (fully potted)
- Flexible LED colour & function Assignment
- Audible Buzzer (can use as DOTL)
- Multi-drop RS-485 Reader LAN
- Individual Reader Heartbeat Monitoring
- Auto Reader Discovery on Inner Range systems
- OSDP Compatible
- Read Card Serial Number (CSN) From 3rd Party Cards (Multi-Format Version Only)
- Support for Custom Site Codes and Site Specific Encryption
- User Programmable Cards Offer Great Flexibility for Installers
- Global Configuration From Inner Range Systems (including firmware updates)
- Small Footprint (Dimensions: 40 mm x 96 mm x 16.5 mm)



SIFER Connectivity Guide	Host Module			
	IAC	SLAM	ILAM	Inception Controller
SIFER Reader Qty	16	4	16	8



### Specifications

#### Physical

Dimensions:	40 mm x 96 mm x 16.5 mm (26.5 mm with Spacer) 1.575" x 3.78" x 0.65" (1.043" with Spacer)
Shipping Weight:	108grams (Reader & Accessories)
Mounting Plate:	91.5(L) x 38(W) (mm)
Mounting Method:	2 x fixing screws for mounting plate
Mounting Holes:	65.5mm hole spacing
Mounting Surface:	Optimised for flat non-metallic surfaces
Cavity Cable Entry Hole:	Up to 20mm
Installation Environment:	-25°C to +65°C (-13°F to +149°F) @15% - 90% relative humidity (non-condensing)
Ingress Protection:	IP67

#### Reader Protocols

Device Communications:	Open Supervised Device Protocol (OSDP)
Operating Frequency:	13.56 Mhz
Credentials:	Mifare DESFire© EV1/EV2/EV3 with AES encryption
Credentials:	Read Card Serial Number (CSN) from 3rd party cards

#### Connections

Pigtail Cable Length:	500mm
Pigtail Extension Cable Type:	2-pair 7/0.20 (24AWG) twisted pair data cable as minimum. 2-pair 14/0.20 (21AWG) multi-strand shielded twisted pair data cable is preferred (e.g. Belden 8723). See installation manual for more info.
Connection Methods:	RS-485 multi-drop star or daisy chain configurations
Distance to Host Module:	Up to 1000 meters. See installation manual for more information
Max Readers:	Up to 16 with IAC & ILAM, Up to 8 with Inception Controller, Up to 4 with SLAM
Compatible Host Modules:	Standard LAN Access Module (SLAM), Intelligent LAN Access Module (ILAM), Inception Controller, Integriti Access Controller (IAC)

#### Reader Security

Physical Tamper:	Optical beam to mounting surface
Card to Reader:	128bit AES encryption
Reader to Access Module:	128bit AES encryption
Vandal Resistance:	Fully encapsulated vandal resistant electronics

#### Reader Configuration

LAN Addressing:	Fully automatic when used with Inner Range systems Manual addressing with 3rd party OSDP compatible systems
Firmware Updates:	Over-the-wire firmware updates when used with Inner Range systems
Reader Purpose Options:	Control a Door, Control a Lift, Log on, Area status toggle

#### LED & Beeper Indicators

LED Configuration:	Brightness, Colours & Feedback modes - configurable via Integriti Software or Inception Controller
LED 1 & 2 Colour Options:	RGB Indicator 23 colour selectable
Feedback Modes for LED's:	Area Status, Area Alarm/Isolated, Entry/Exit Delay, Door open/locked status, Valid/Invalid card badge, No LED's
Beeper Volume:	Variable - configurable via Integriti software or Inception Controller
Beeper Feedback Options:	Valid/Invalid card badge, Door Open tool long (DOTL), Area Alarm, Entry/Exit Delay

#### Power Requirements

Input:	11-14V DC <500mV ripple
Current Consumption:	65-100mA typical, 150mA MAX with all LED's driven at full brightness

#### Compliance

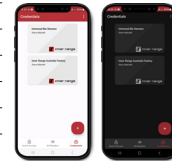
Electrical	
Environmental	

### Ordering Options



#### Readers

994723  
IR Mobile Access Reader



#### Credentials

##### Mobile Access Credentials

994635ICP      994635INF  
Inception      Infiniti

994635  
Integriti



##### ISO Cards

994610  
SIFER-P DESFire© EV3 4K ISO  
(Pre-programmed - Printed)

994612  
SIFER-U DESFire© EV3 4K ISO  
(User Programmable - Printed)

994614\*\*  
SIFER-C DESFire© EV3 4K ISO  
(Custom Programmed - Printed)

994580  
ECOLITE MIFARE Ultralight EV1  
(Pre-programmed)



##### Key FOB's

994616  
SIFER-P DESFire© EV3 4K FOB  
(Pre programmed - Printed)

994618  
SIFER-U DESFire© EV3 4K FOB  
(User Programmable - Printed)

994620\*\*  
SIFER-C DESFire© EV3 4K FOB  
(Custom Programmed - Printed)



#### Management Tools

994750 SIFER-U  
Card Programming Station

994751  
SIFER Card Enrollment Station

994614CNF\*\*  
SIFER -C Reader Configuration  
Card



#### Mounting Accessories

999037  
10mm Spacer (For mounting to metal)

999034  
Vandal Resistant Cover - standard

999035  
Vandal Resistant Cover with  
inbuilt spacer

\*\*SIFER-C cards are programmed with a custom encryption key and will require at least one SIFER Reader Configuration card with the initial batch.