DATA SHEET

Mobile Access Reader

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

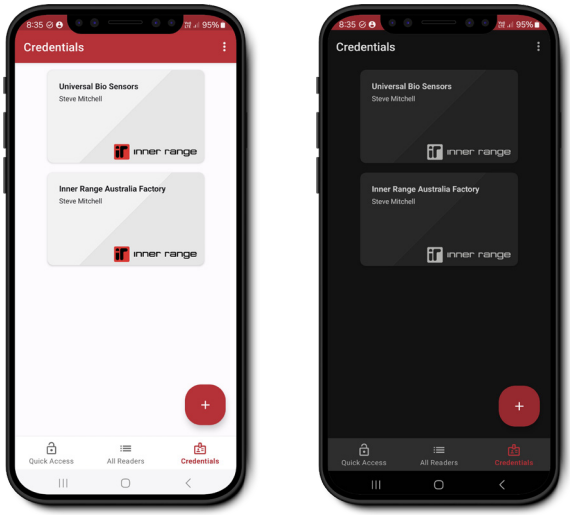
Mobile Access Readers are IP67 rated and available with site-specific encryption keys.



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



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Mobile Access Reader

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

RoHS

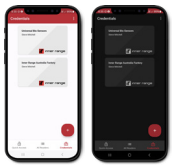
Ordering Options



Readers

994723
IR Mobile Access Reader

Credentials



Mobile Access Credentials

994635ICP
Inception

994635INF
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.

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