inception
WEB POWERED SECURITY
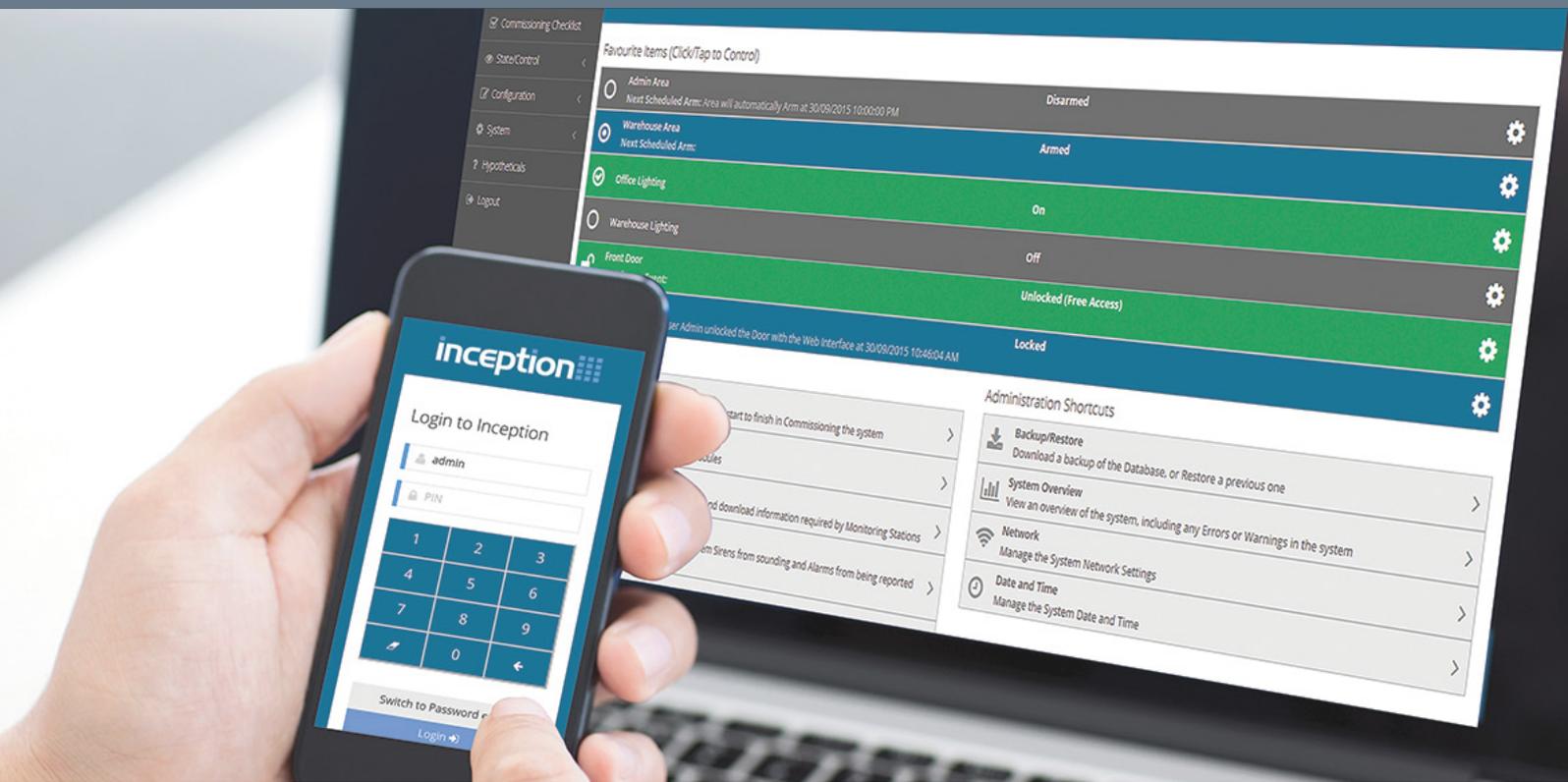
Security Alarm	Access Control	Custom Automation	No Software Required	Multiple Devices	Easy Setup Checklist Prompting	Send IP Alarms Via The Multipath -IP Network

Inception Web Powered Security Controller V2.0
Increased Capacity - Reduced Price

512 Zones

128 Doors

10,000 Users

256 Readers

Simple plug and play technology

USB
For Wi-Fi Adaptor or Multipath-IP
T4000 Security Communicator

Ethernet Port
For network connection and IP alarm
communications via SkyTunnel

Tamper Input
Monitor Inception's outer enclosure to detect
any attempts to tamper with the controller

LED Indicators
Quickly see the status of Inception's
system, connections and outputs

8 Universal Inputs
Monitor a mix of EOL devices,
buttons, switches or doors

Device Power
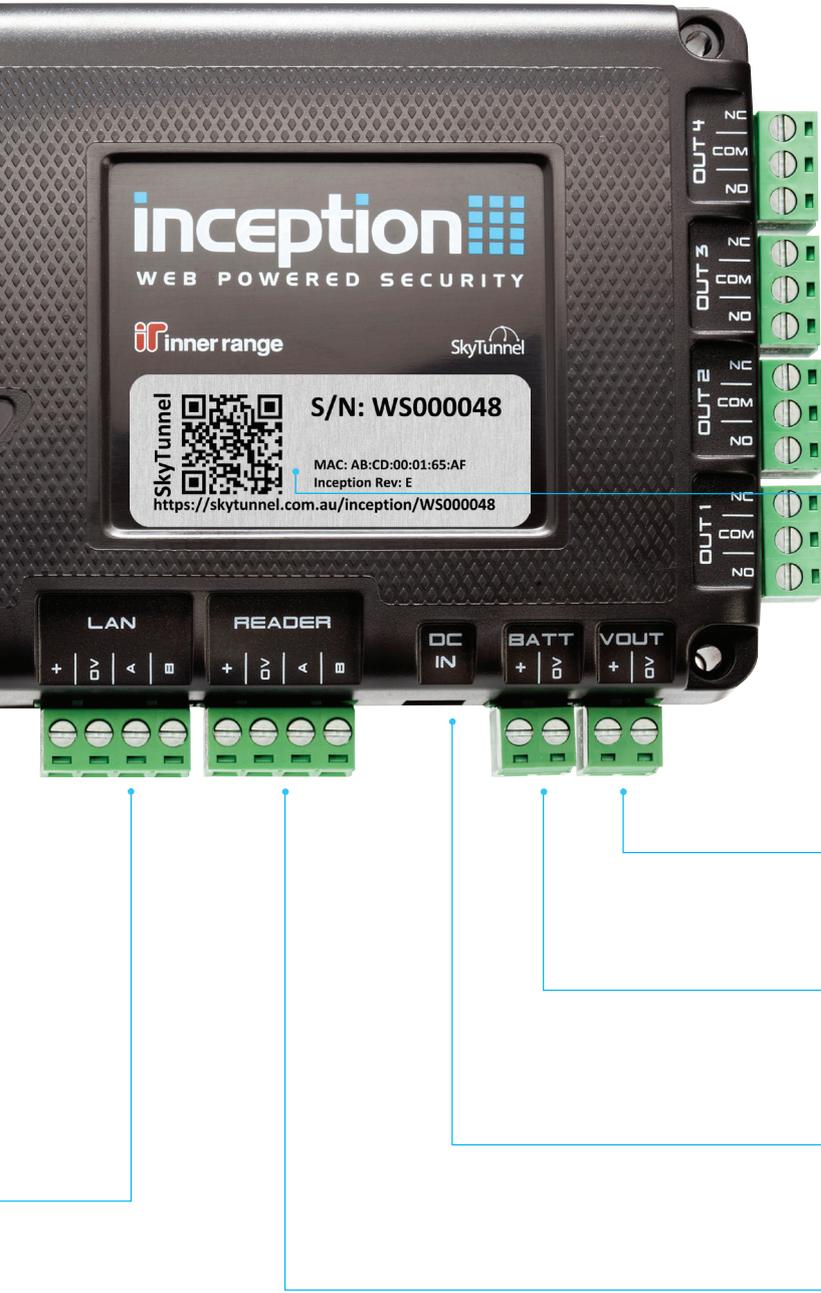12vDC output for powering PIR's,
T4000 or other security devices

RS-485 LAN Expansion Port
Add LAN expansion modules to Inception including keypads, input/output
expanders, access control, modules and wireless fobs and detectors

Inception LAN Module Compatibility Chart

Module / Device Description	Code
8 Input LAN Expander (UniBus Host)	21120
UniBus 8 Input Expander	21200
UniBus 8 Relay Expander	21211
Standard LAN Access Module (SLAM)	21140
Paradox RF Expander	20338
EliteX Terminal / Elite Terminal (Grey)	20309 / 20307
SIFER Smart Card Reader (Standard / Multi Format)	21030 / 21031
T4000 Communicator / T4000 Communicator Spark Network Only	35409 / 35409SPARK
LAN Over Ethernet Device (CLOE)	20500
LAN Isolater	20355
Fibre Modem (Multi Mode / Single Mode)	20502 / 20503
Wi-Fi Adapter	21011

S/N: WS000048

MAC: AB:CD:00:01:65:AF
Inception Rev: E
https://skytunnel.com.au/inception/WS000048

4 Universal Relay Outputs
Ouputs are truly universal. Control door locks, connect alarm sounders or switch automation controls and external devices

SkyTunnel Web Interface
Scan the QR code or browse to the web address to access your Inception's web interface from any Internet connected device via the SkyTunnel service

Device Power
12vDC output for powering PIR's, T4000 or other security devices

Backup Battery Connection
Connect a 12V SLA battery for back-up power. Can also be used to power Inception from a separate external battery-backed 12-14vDC power supply

Power Input
18V-24vDC 2.5A to suit Inception's inline power supply

SIFER Reader RS-485 Port
Connect up to 8 SIFER readers for in/out access control of up to 4 doors

System Capacities

	On-Board Inception Controller	With LAN Expansion
Doors	4*	128
SIFER Readers	8	256
Wiegand Readers	5**	128/256***
Areas	32	32
Inputs	8	512
Outputs	4*	512
Lift Cards	32	32
Users	10,000	10,000
Events	50,000	50,000

*The Inception controller has 4 relay outputs in total. These can be used as lock relays for doors or general purpose dry contact outputs.
** via 8 OSDP to Wiegand / Wiegand to OSDP Converters.
***256 Wiegand readers require a combination of OSDP to Wiegand / Wiegand to OSDP converters and 127 Standard LAN Access Modules.

Inception Peripherals

SIFER Smart Card Reader

The SIFER card reader is a Smart card reader designed and manufactured by Inner Range. It is a multi-drop RS-485 connected 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. SIFER readers utilise the Mifare DESfire EV1 card format. SIFER allows the colour scheme of the indicator LEDs to be customised according to the sites requirements. The internal beeper is used to provide audible feedback to indicate valid access, access denied and other event or warning sounds.

Up to 8 SIFER readers may be connected to the RS-485 reader port on the Inception controller and up to 4 may be connected to the Standard LAN Access Module (SLAM). SIFER's bus interface allows all of the readers to be connected via just one cable. With a single connection to the controller, time and money is saved through the reduced need for cabling. SIFER readers are IP67 rated and can be configured with site specific encryption keys. The SIFER reader is available in two versions: The standard SIFER which will only read SIFER cards, and the Multi-Format SIFER which can read SIFER cards and also the Card Serial Number (CSN) of other smart cards such as MiFare & iClass.

21030 SIFER Smart Card Reader
21031 SIFER Smart Card Multi-Format Reader
21030K SIFER Keypad/Smart Card Reader
21031K SIFER Keypad/Smart Card Multi-Format Reader

SIFER Cards & Fobs

1. **SIFER-P:** Pre-programmed 'stock' cards. The most cost-effective card option without customisation options. With more than four billion card numbers available, each SIFER-P card is guaranteed to be unique.

2. **SIFER-U:** User Programmable cards that allow an installer to customise the card number, site code and use their own encryption key via the SIFER Programming Station (Code 21036)

3. **SIFER-C:** Custom batch orders configured by our factory according to the specified card number range, site code, encryption key and printing options. Cards cannot be re-programmed at a later stage by the installer or our factory.

ISO Cards	**21040** SIFER-P DESFire EV1 4K ISO - Pre-programmed - Printed
	21041 SIFER-U DESFire EV1 4K ISO - User Programmable - Printed
	21042 SIFER-C DESFire EV1 4K ISO - Custom Programmed - Printed
FOB's	**21043** SIFER-P DESFire EV1 4K FOB - Pre-programmed - Printed
SIFER Tools	**21036** SIFER Card Enrolment Station for SIFER-U cards

OSDP to Wiegand / Wiegand to OSDP Converter

The OSDP to Wiegand / WIegand to OSDP Converter is a small inline device that can operate in two main modes that can open up many new options when determining and designing a site's hardware requirements.

Option 1:

Connect Wiegand readers to OSDP ports
Via the Converter, a Wiegand reader can now be connected to an OSDP port. This allows Wiegand readers to make use of many of the benefits that an OSDP reader bus provides:

• 128bit AES encrypted communication path
• 4-core cables to the module, while still offering beeper, valid and invalid LED control
• Longer cable runs
• More flexible wiring configurations (for example, daisy-chaining readers together for a single run back to the module).

In practice, this allows up to 8 Wiegand readers to be connected directly to an Inception Controller, allowing read-in and read-out abilities on up to 4 doors without extra hardware, which is perfect if upgrading an existing site with access control to Inception. In addition, two extra Wiegand readers can be connected to SLAMs, again allowing read-in and read-out abilities on both doors of a SLAM.

Option 2:

Connect OSDP readers to Wiegand reader port. Via the Converter, OSDP readers such as Inner Range SIFER readers or other products can now be connected to existing Wiegand reader ports. This allows SIFERs, for example, to be used on older Concept hardware or other products in preparation for a site upgrade.

When used in conjunction with an Inception system, it allows non-SIFER OSDP readers to be connected to SLAMs, allowing sites with existing OSDP readers to be changed to an Inception site.

21039 Inner Range OSDP to Wiegand / Wiegand to OSDP Converter
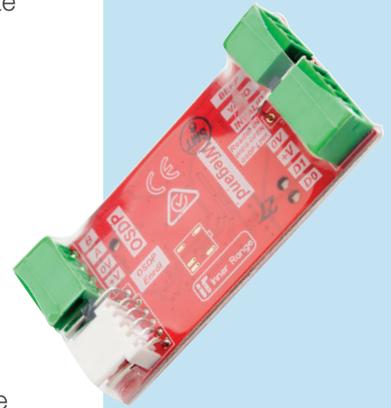
Inner Range T4000 Multipath 3G/IP Communicator

Built from the ground up, the T4000 supersedes previous models and delivers unprecedented features never before seen within the security industry. Whilst the T4000 is incredibly sophisticated, its core strength focuses on ease of installation, ease of operation and low-cost security monitoring. The T4000 can even leverage Inner Range's SkyTunnel cloud based infrastructure for seamless IP connectivity and super-fast alarm reporting.

• Dual 3G and Ethernet alarm transmission paths allowing simple connection of many brands of alarm panels.
• Capable of providing a communications path for upload/download programming of many popular alarm systems on the market when a PSTN line is not available at the installation site.

35409 Inner Range T4000 Multipath 3G/IP Communicator

Inception Keypads & Cabinets

Elite LCD Keypad

The EliteX LCD keypad is elegantly designed and features a clear and easy to read OLED display. Users can use the Keypad to perform typical operations on the Inception system. This includes control of security areas, door access, event activity review and controlling the state of outputs.
Users PIN numbers can also be changed directly from the keypad.
The OLED LCD display shows plain text navigation through operations and alarms, events and items are presented by name.

EliteX can also be used by the installer to access a limited range of Inception's configuration options. The keypad's 8 indicator LEDs can also display a real-time status of the security system.

20309 EliteX LCD Terminal Keypad
20307 Original Elite LCD Terminal Keypad (Ivory)
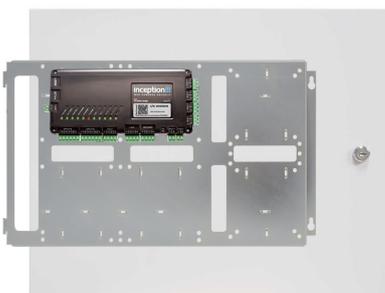**20308** Original Elite LCD Terminal Keypad (White)

Cabinet Options

The Inception metal cabinets are sturdy universal cabinets designed to house a wide range of Inner Range products.

22001   Inner Range Inception Controller in Standard Cabinet with Chassis

22002   Inner Range Inception Controller in Large Cabinet with Chassis

22003   Inner Range Inception Controller in Mega Cabinet with Chassis

Inception Controller

SPECIFICATIONS

Case Material:	ABS plastic
Dimensions:	205mm x 94mm x 36mm
Shipping Weight (gross):	1.2kg
Installation Environment:	0°C - 50°C @ 15% - 90% relative humidity (non-condensing)
Power Source: - To "DC IN" (recommended): - To "BATT" (alternate method):	18V to 24vDC 2.5A (e.g. the supplied 24V 2.5A PSU) *Note: A 12V. SLA Battery of 7AH to 18AH capacity must be connected to 'BATT' input.* 12.8V to 14vDC 2.8A (e.g. a separate external battery-backed power supply) *Note: "DC IN" should not be connected when powered to via the BATT connection.*
Battery (supplied separately):	12 Volt Sealed Lead-Acid (gel) type - 7 to 18 Amp-Hour
Idle Current Consumption: - DC IN: (24V DC) - BATT: (DC IN = 0V)	*Note: Does not include battery charging or current required by any peripheral devices.* 60mA (85mA with Ethernet connected) 110mA (150mA with Ethernet connected)
Additional Current Required For: - Built-in Relays: (out 1 - out 4) - Inception Wi-Fi Adapter: - Inception 4-Port USB Hub:	 25mA per relay (33mA when Controller powered from "BATT" input) 25mA (40mA when Controller powered from "BATT" input) 20mA (40mA when Controller powered from "BATT" input) Not including current required by any device connected to a USB Port
Typical Battery Backup Time: - 7 AH Battery: - 18AH Battery: - 18AH Battery:	With Ethernet of Wi-Fi + 1 LCD Terminal + up to 200mA for other devices. 16 Hours 40 Hours 24 Hours Configuration as above but up to 500mA for other devices
Power Supply Outputs: - V OUT: - LAN +: - READER +: - USB 2.0: - Maximum Combined Current - All Outputs:	*See notes 1 & 2 below* 13.4vDC +/- 150mV 1A max 13.4vDC +/- 150mV 1A max 13.4vDC +/- 150mV 1A max 5vDC 500mA max 2.5 A
Battery Charger Output Vottage:	13.75vDC / Output Current: Up to 500mA
Typical Battery Backup Time (7Ah battery):	16 hours (with controller connected to Ethernet or Wi-Fi with 1 x Elite keypad and up to 200mA for other devices such as PIR's or readers, etc)
AC Fail Detect (on "DC IN"):	16.5vDC / Low Battery Detect (on "BATT" input): 11.0vDC
Output Fuses:	Individual PTC protection - self-resetting
Battery Input Fuse:	7A onboard fuse - non-replaceable
Battery Deep Discharge Protection	Activated: 10.4V / Restored: 12.5V
Zone Inputs:	8
Relay Outputs:	4 ("OUT1-4")
Relay Contact Rating:	5A 30vDC or AC *(see note 2 below)*
Indicator LED's:	11
Alarm Reporting Formats:	ContactID or OR-fast (via T4000 or SkyTunnel)

NOTES:
1. *Please refer to the respective product data sheets for details of power supply current requirements of the accessories and expansion modules that may be powered from the Inception controller power supply.*
2. *A separate external battery-backed power supply may be required for devices connected to the Inception controller if the current required is in excess of the maximum current allowed for that output, or causes the maximum combined output current specification to be exceeded.*

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Intelligent Security Solutions

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inception
W E B   P O W E R E D   S E C U R I T Y

Multipath iF
Intelligent Alarm Transmission Systems

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