

The Integriti Access Controller (IAC) is a state-of-the-art IP connected intelligent Controller designed for Access Control applications. The IAC can directly manage up to 8 doors locally or up to 250 doors via RS-485 Sub-LAN expansion. All decision making is intelligently processed by the Controller with no reliance on the system server (should the connection to the server be offline). The result is a solution that is incredibly quick, robust and highly intelligent.

The main Controller is equipped with connections for 2 Doors and 4 Wiegand Card Readers, a Watchdog Output, Ethernet and USB ports and a dedicated RS-485 reader port. Additional connections for Doors and Wiegand Readers can be added via the IAC's UniBus port with up to 3 UniBus 2 Door/2 Reader expansion devices (Part. 996535PCB&K), this allows for flexible configurations of 2, 4, 6 or 8 doors, and up to 10 Wiegand readers.

The RS-485 Reader port accommodates up to 16 Inner Range SIFER or compatible third party OSDP multi-drop readers, providing 'in & out' directional access control for each door. The IAC can also be used for integration of wireless door locking systems from Assa Abloy Aperio, SimonsVoss or Salto Sallis. See the Wireless Locking system Integration Guides on the Inner Range website for more details.

Larger systems may consist of many IAC's networked together to form an enterprise-wide IP connected intelligent access control solution. Each IAC can support up to 3,000 Zone Inputs, 3,000 Outputs, 250 Areas and over 1,000 Card Readers and 250 Doors. User capacity of up to 100,000 users is available, and capacity for 1,000,000 users is also available with the User expansion kit. (Part. 996002L5)



ABOVE:  
IAC shown in 8 Door / 10 Reader configuration. (IAC with UniBus 2 Door / 2 Reader expansion devices connected). Housed in the WideBody enclosure with hinge plate, 8Amp PSU, Fire Door override relay card and 2x 17Ah batteries

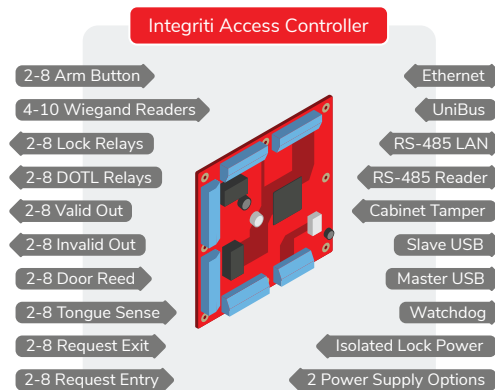
## Main Controller Features

- 2 Door Interfaces (Lock Relays) expandable to 8 via UniBus
- Reader Port – Encrypted RS-485, Up to 16 SIFER Readers
- Reader Port – RS-485/OSDP, Up to 16 compatible OSDP Readers
- Wiegand Reader ports – 4, expandable to 10 via UniBus
- Aperio, SimonsVoss, Salto Sallis integration - up to 8 Doors via RS-485 Reader port
- 2 DOTL Relay Outputs, expandable to 8 via Unibus
- RJ45 - 10/100 Ethernet Port
- SkyTunnel/Multipath-IP Alarm reporting (via RS-232 STU device)
- Peer-to-Peer Dialler Alarm Reporting (via an ISC Controller)
- Advanced Peer-to-Peer Mode
- RS-485 Sub-LAN
- USB Master & Slave Ports
- UniBus In-Cabinet Expansion Interface
- Dedicated Watch Dog Output
- Dedicated Tamper Input
- 32 Bit ARM CPU, 64 MB RAM, 4 GB Micro SD Memory
- Firmware Upgrade via USB or Software
- Choice of 3Amp or 8Amp Power Supply and enclosure options
- Built-in module locator buzzer

UniBus Device Compatibility Guide	UniBus Host Module			
	ISC	IAC	8 Zone Expander	ILAM
8 Zone Expander	2	0	3	0
8 Relay Expander*	4	2	4	2
2 Door / 2 Reader Expander	0	3	0	3
16 Floor Lift Interface	6	6	6	6
RS-232/RS-485 UART	4	4	0	0
Analogue Expander	4	0	6	0

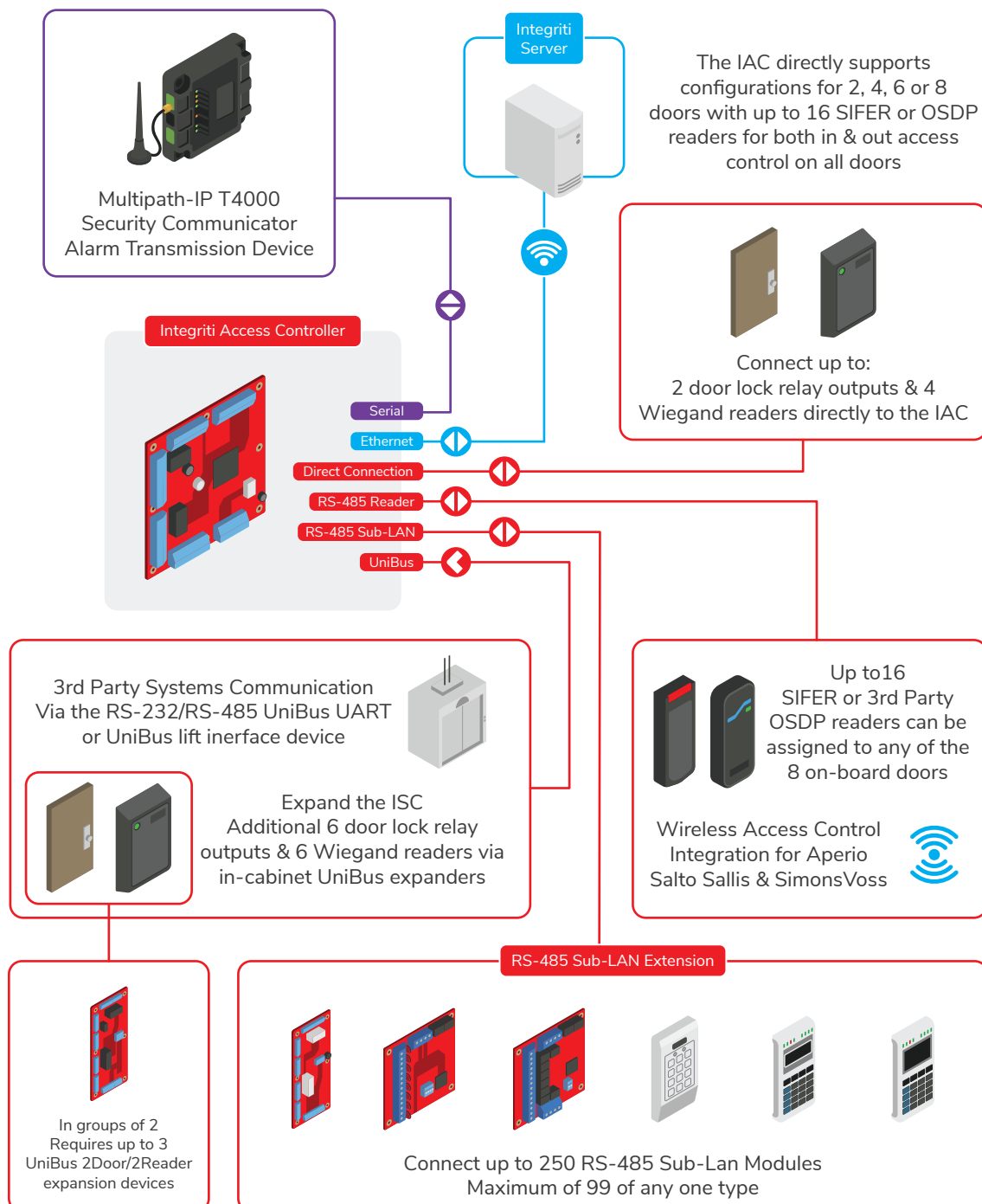
\*Relays can be used for general purpose outputs when mapped to Aux 1~16 on IAC, and cannot be mapped to Aux 17~32

## Connectivity



### Integriti Access Controller Architecture

The IAC directly supports configurations for 2, 4, 6 or 8 doors with up to 16 SIFER or OSDP Readers for both in and out access control on all doors





Specifications

Physical

Enclosure Dimensions:	Medium - 460(L) x 358(W) x 85(D) (mm): Part# 995201PE3 or 995201PE8 - houses 1 x 996035+ 1 x 996535*
	XLarge - 702(L) x 358(W) x 85(D) (mm): Part# 995203PE3 or 995203PE8 - houses 1 x 996035 + up to 3 x 996535*
	WideBody - 580(L) x 510(W) x 95(D) (mm): Part# 995204PE3 or 995204PE8 - houses 1 x 996035 + up to 3 x 996535*
	Rack Mount - 2RU 680(L) x 420(W) x 85(D) (mm): Part# 995220PE3 or 995220PE8 - houses 1 x 996035 + up to 2 x 996535*
PCB Size Code:	Integriti "A" size
PCB Dimensions:	200(L) x 200(W) x 45(D) (mm)
Shipping Weight :	700grams (Circuit board & Accessories only)
Installation Environment:	0°C - 70°C @15% - 90% Relative humidity (non-condensing)

Electrical (For PCB Only)

Power Supply Input:	11V to 14V DC (from external 3Amp or 8Amp SMART PSU)
Current Consumption:	150mA standby, 220mA with on-board lock relays on, add 15mA for each active DOTL relay
	NOTE: Current consumption does not include the current required by readers or other external devices such as locks, buzzers, lamps or any device attached to the DOTL, Valid, Invalid, RS-485 Reader and UniBus connections
Reader Head Supply O/P:	5V/13.8V DC, 300mA maximum per reader, 1Amp max for all readers
Over Current Protection:	Reader +V connections. Protected with self-resetting PTC's
Typical Reader Current:	Allow 50~120mA for small Proximity Readers, 120~180mA for standard Proximity Readers (See reader datasheets for specific detail)
RS-485 Reader LAN Current:	Allow 75~150mA per SIFER reader connected

Contact Ratings

Lock Relays:	5 Amps @ 30V DC
DOTL Relays:	1 Amp @ 30V DC (Door Open Too Long output)




Connections

Ethernet:	10/100 Ethernet Port
USB Host:	USB type "A" connection
USB Slave:	USB type "B" connection
Port Zero:	5 Pin header for PC or Multipath-IP STU connection
Smart Card Slot:	For use with Smart Card (System Options Card)
Lock 1 & 2:	Includes Lock+, Lock-, NO/COM/NC
Door 1 & 2:	Includes Reed, 2 x 0v, Tongue, REN, REX, DOTL contacts
Wiegand Reader Ports x 4:	Includes Valid, Invalid, 0V, Reader+, D1, D0, ARM
Lock Power Input:	Includes Lock+, Lock- connections from external PSU
Cabinet Tamper:	2 pin connection for cabinet tamper switch
Watchdog Output:	2 pin connection for remote monitoring system
UniBus Port:	1 x UniBus Host expansion port for up to 6 local UniBus devices
RS-485 LAN:	1, Includes LAN+, LAN-, A, B. (LAN addressing set via DIP switches)
RS-485 Reader:	1 Includes LAN+, LAN-, A, B, Auto addressing for SIFER Readers
External Power:	10way header block for connection to Inner Range power supplies

External Power Supply Monitoring (Compatible with IR SMART Power Supplies)

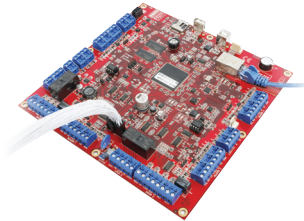
AC Fail:	External PS AC Fail
Low Battery:	External PS Low Battery
LAN Fuse:	External PS LAN Fuse
Detector Fuse:	External PS Detector Fuse
Low Volts:	External PS Low Volts
PSU Fail:	External PS Fail

Compliance

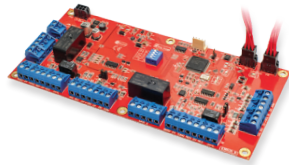
Electrical	 
Environmental	 

\* Additional external power may be required for 3Amp models.

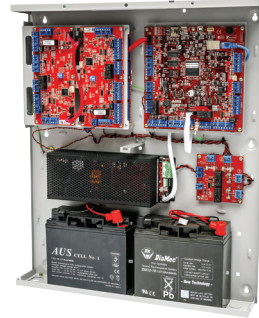
### Ordering Options



**996035PCB&K**  
Integriti IAC Controller PCB



**996535PCB&K**  
UniBus 2 Door Expander PCB & Accessories  
(Includes 270mm UniBus patch cable)



IAC Controller shown in 8 Door configuration.

Housed in a WideBody Enclosure with 8Amp SMART Power Supply & 3 x UniBus Door Expanders.  
(IK-996035WB8PS Kit)

The optional Fire door emergency release relay card is also shown. (Part 995916)

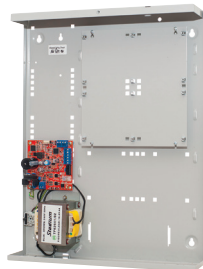
The IAC Controller is available from Inner Range distributors in kit form (These are kitted by the distributor)

**IK-996035M2PS** Integriti IAC 2 Door Kit Medium Enclosure with 3Amp SMART PSU

**IK-996035WB4PS** Integriti IAC 4 Door Kit WideBody Enclosure with 8Amp SMART PSU

**IK-996035WB6PS** Integriti IAC 6 Door Kit WideBody Enclosure with 8Amp SMART PSU

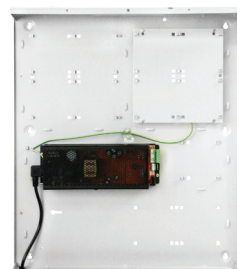
**IK-996035WB8PS** Integriti IAC 8 Door Kit WideBody Enclosure with 8Amp SMART PSU



**995201PE3**



**995203PE8**



**995204PE8**



**995220PE3**

### Enclosures to Suit IAC

**995201PE8** - Medium with 8Amp SMART PSU Houses 1 x 996035PCB&K & 1 x 996535PCB&K

**995201PE3** - Medium with 3Amp SMART PSU Houses 1 x 996035PCB&K & 1 x 996535PCB&K\*

**995201** - Medium empty enclosure only

**995203PE8** XLarge with 8Amp SMART PSU Houses 1 x 996035PCB&K & up to 3 x 996535PCB&K

**995203PE3** XLarge with 3Amp SMART PSU Houses 1 x 996035PCB&K & up to 3 x 996535PCB&K\*

**995203** XLarge empty enclosure only

**995204PE8** WideBody with 8Amp SMART PSU Houses 1 x 996035PCB&K & up to 3 x 996535PCB&K

**995204PE3** WideBody with 3Amp SMART PSU Houses 1 x 996035PCB&K & up to 3 x 996535PCB&K\*

**995204** WideBody empty enclosure only

**999027** WideBody hinged expansion plate kit to suit 995204

**995220PE8** Rack Mount 2RU drawer with 8Amp SMART PSU Houses 1 x 996035PCB&K & up to 2 x 996535PCB&K

**995220PE3** Rack Mount 2RU drawer with 3Amp SMART PSU Houses 1 x 996035PCB&K & up to 2 x 996535PCB&K\*

**995220** Rack Mount empty enclosure only

\* Additional external power may be required for enclosures with 3Amp PSU



**996092**



**996091PCB&K**

### Power Supplies to suit IAC

**996092**

8Amp 13.75V DC SMART Power Supply Module, PSU only

**996091PCB&K**

3Amp 13.75V DC SMART Power Supply PCB & accessories