DATA SHEET

Access Controller (IAC)

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 240 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. *Please see our website for Wireless Locking system Integration Guides 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 240 Doors. User capacity of up to 100,000 users is available as a standard expansion option, and capacity for 1,000,000 users is also available with the Level 5 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 locater buzzer

Integriti IAC Standard Operating Level

- 16 Doors, 100 Zones, 10,000 Users, 30,000 Events (IAC Level 0 standard option)**

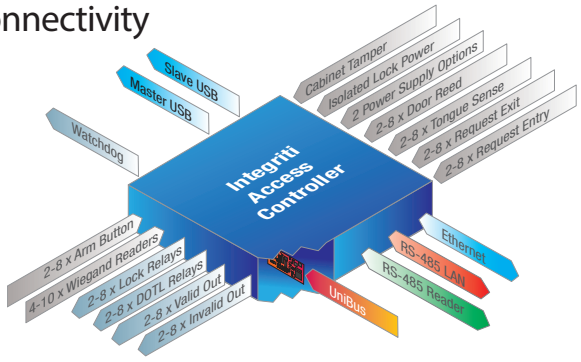
IAC Operating Level Expansion Options

- 996020L1 - Level 1 SMART Card: 40 Doors, 200 Zones, 2,000 (10,000*) Users, 20,000 (30,000*) Events
- 996020L2 - Level 2 SMART Card: 80 Doors, 600 Zones, 10,000 Users, 30,000 Events
- 996020L3 - Level 3 SMART Card: 160 Doors, 2,000 Zones, 65,000 Users, 60,000 Events
- 996020L4 - Level 4 SMART Card: 240 Doors, 3,000 Zones, 100,000 Users, 100,000 Events
- 996002L5 - Level 5 User expansion kit: 240 Doors, 3,000 Zones, 1,000,000 Users, 100,000 Events***
- See page 23-25 for full details on SMART card options

UniBus Device Compatibility Guide		UniBus Host Module			
		ISC	IAC	8 Zone Expander	ILAM
UniBus Device	8 Zone Expander	2	0	3	0
	8 Relay Expander*	4	4	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
	2nd Network Interface Card	1	1	0	0

**Relays can be used for general purpose outputs when mapped to Aux 1~16 on IAC, and will mimic the Lock & DOTL outputs on doors 1-8 when mapped to Aux 17~32*

Connectivity



**The quantity show in brackets is only applicable to IAC Controllers as the "IAC Level 0" factory option has been bundled with the Controller as standard.*
***Where the Smart Card is removed or replaced with a standard Level 0 Smart Card the IAC will revert to 16 Doors, 100 Zones, 200 Users, 10,000 Events*
**** Level 5 is a physical expansion kit which is attached to the IAC Controller. (The IAC must first be operating at Level 4)*

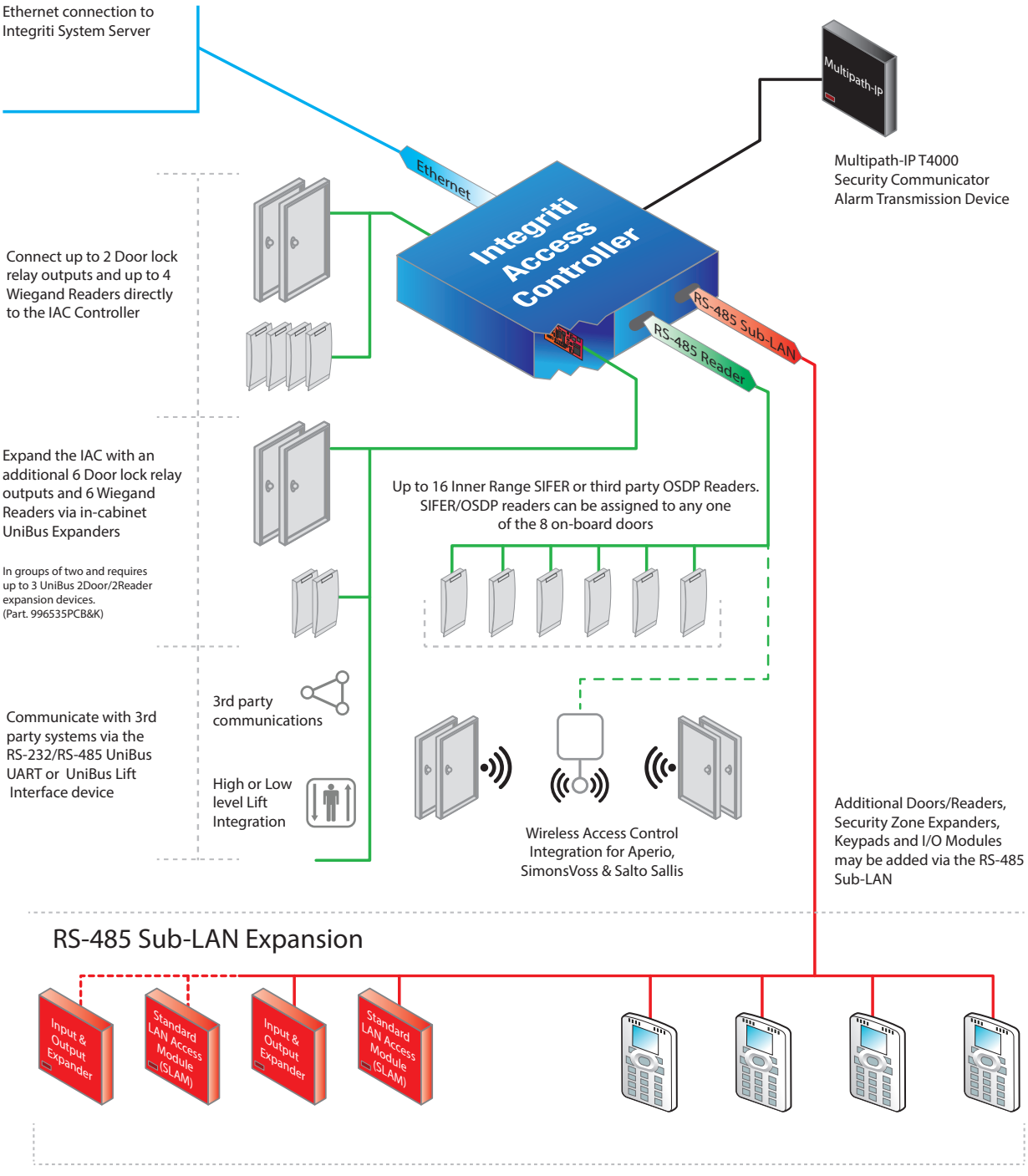
DATA SHEET

Access Controller (IAC)

Hardware

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



integriti

DATA SHEET

Access Controller (IAC)

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)
Weight:	8.2 k.g. (In medium enclosure including mains transformer, 7AH battery and cover)
Installation Environment:	0ºC - 70ºC @15% - 90% Relative humidity (non-condensing)

Electrical (For PCB Only)

Power Supply Input:	11V to 14VDC (from external Integriti 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 @ 30VDC
DOTL Relays:	1 Amp @ 30VDC (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 Integriti power supplies

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

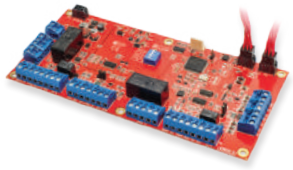
AC Fail:	External PS AC Fail
Low Battery:	External PS Low Battery
LAN Fuse:	External PS LAN Fuse
Detector Fuse:	External PS Detector Fuse
Low Volts:	External PS Low Volts
PSU Fail:	External PS Fail

Compliance

Electrical	CE
Environmental	RoHS

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

Ordering Options



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)

Integriti IAC Controllers

996035PCB&K
Integriti IAC Controller PCB

UniBus Door Expander

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

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

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

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

Medium – 995201I empty enclosure only

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

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

XLarge - 995203 empty enclosure only

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

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

WideBody - 995204 empty enclosure only

WideBody - 999027 hinged expansion plate kit to suit 995204

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

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

Rack Mount - 995220 empty enclosure only

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

996092

996091PCB&K

Power Supplies to suit IAC

996092 8Amp 13.75VDC SMART Power Supply Module, PSU only

996091PCB&K 3Amp 13.75VDC SMART Power Supply PCB & accessories