

The Integriti Security Controller (ISC) is an IP-based master controller for the Integriti modular hardware system. Equipped with 16 Zone Inputs, 2 Auxiliary Relay Outputs, Power Supply, Ethernet Port, and Internal/External Siren outputs, the ISC can be used either stand-alone or expanded further via its UniBus and RS-485 Sub-LAN ports. The flexible, modular design of the ISC allows a single stand-alone controller to be expanded to form a network of IP or RS-485 expansion modules supporting 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).

The ISC also offers a UniBus in-cabinet expansion interface where a variety of UniBus I/O and communications devices can be connected directly to the controller and housed within the same tamper-protected enclosure. Integriti's multi-controller architecture allows any number of ISC's to be combined within the Integriti software package to form a globally managed small, medium or enterprise sized system where the entire network of controllers is managed as a whole. This architecture allows for an infinite number of Readers, Doors, Areas, Zone Inputs and Outputs.

### ISC Controller RS-485 LAN Expansion

Further expansion and functionality is realised with the addition of sub-LAN expansion modules which are connected to the Integriti Security Controller via the RS-485 LAN. These modules can also be connected via standard Ethernet networks if connected using Ethernet Bridge or CLOE devices.

### Alarm Reporting

The IP only ISC does not include a modem dialler for traditional PSTN based alarm reporting. Alarm reporting can be achieved to a Multipath-IP enabled control room using SkyTunnel over Ethernet or by using a T4000 alarm communicator connected via serial cable.

#### Ethernet Connected Services

- Connectivity to Integriti Software
- SkyTunnel® Cloud Services & Smart Phone connectivity
- Peer to Peer communications
- Ethernet alarm reporting to Multipath-IP Control Rooms
- Automation, BMS & HVAC Integration
- EMS / Lift Access Control Integration

### Features

- RJ45 - 10/100 Ethernet Port
- RS-485 Sub-LAN
- USB Master & Slave Ports
- UniBus In-Cabinet Expansion Interface
- Multipath-IP / GSM STU Port (Port Zero RS-232)
- 16 Zone Inputs - Multistate or Analogue
- 2 Auxiliary Output Relays & separate Watch Dog Output
- Dedicated Tamper Input
- Internal & External Siren Outputs
- AC Present Indicator Output
- Intelligent Power Control via Smart Fuses
- 32 Bit ARM CPU with Real Time Clock
- 64 MB RAM / 4 GB Micro SD Memory
- Smart Card Slot
- Firmware Upgrade via USB, LAN or Software

### Hardware Expansion Capabilities

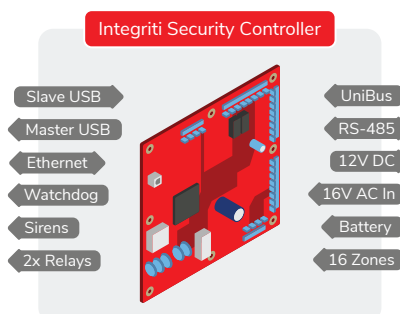
- Zone Inputs - Expandable to 32 via UniBus – 3,000 via RS-485 Sub-LAN
- Auxiliary Outputs - Expandable to 32 via UniBus – 3,232 via RS-485 Sub-LAN
- Doors – Expandable to 250 via RS-485 Sub-LAN
- Readers - Expandable to 1,584 via RS-485 Sub-LAN
- On-board User capacity -100,000, 1,000,000 with User Expansion Kit fitted
- On-board Review Events - 100,000
- Ports - RS-232 / RS-485 Serial Ports - Expandable to 8 with UniBus UART



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

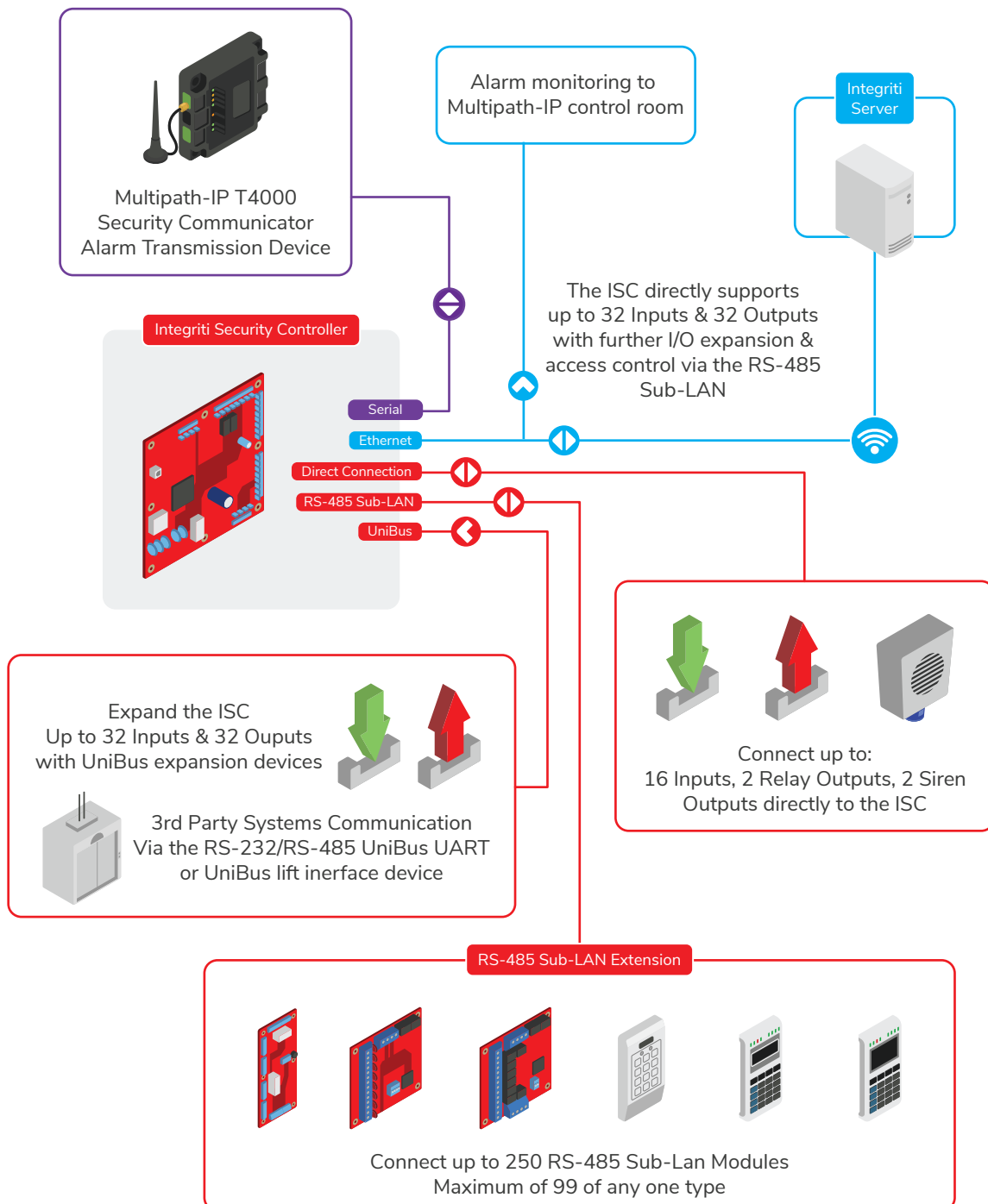
\*Relays can be used for general purpose outputs when mapped to Aux 1~16 on IAC, and cannot be mapped to Aux 17~32

### Connectivity



## Integriti Security Controller Architecture

The ISC directly supports up to 32 Inputs and 32 Outputs with further I/O expansion and access control via the RS-485 Sub-LAN



## Specifications

### Physical

Enclosure Dimensions:	Medium size enclosure 460(L) x 358(W) x 85(D) (mm)
PCB Dimensions:	200(L) x 200(W) x 45(D) (mm)
Shipping Weight :	6.5kg (In medium enclosure with mains transformer and cover)
Installation Environment:	0°C - 50°C @15% - 90% Relative humidity (non-condensing)
Cabinet Battery Bracket:	To suit 12V 7AH sealed lead acid battery

### Electrical

Power Supply Type:	Type A (EN50131-1)
AC-DC Adapter Input Voltage:	100-240 V AC 50/60 Hertz
AC-DC Adapter Output Voltage:	24 V DC
AC-DC Adapter Current Consumption:	Maximum 250 mA from 240V AC source
Transformer Input Voltage:	240V AC -10% / +10%. 50Hertz
Transformer Output:	16.5V AC. 50 Hertz
Transformer Current Consumption:	Maximum 500 mA from 240V AC source
Transformer Fuse Protection:	Separate AC mains input fuse. 1.0 AMP Slow Blow M205 (20mm)
PCB AC Input Voltage:	16 to 18V AC. 50/60 Hertz OR 24 V DC
Battery Charger Output:	13.75V DC -0.15/+0.05 V (AC power required)
12V, Sealed Battery Capacity:	Use 7.2AH or 18AH Lead Acid Type: Max 18AH
Battery Input Fuse:	5 Amperes
Low Battery Alarm:	< 11V DC +/- 100mV
Deep Discharge Protection:	Activates at 10.4 V +/-100mV. Restores at 12.4V +/- 100mV
LAN "POS" & DET+:	Output Voltage: 13.75V DC -0.15/+0.05 V (When AC power Present)
LAN "POS" & DET+ Smartfuse:	2 Amperes
Maximum Ripple:	At maximum ancillary load current: < 200mV P-P / 75mV RMS
Low DC Voltage Alarm:	< 11V DC +/- 100mV
Siren Drivers:	Each capable of driving a 4 Ohm speaker (or 2 x 8 Ohm in parallel)
Auxillary Relay Ratings:	30 V DC 1A max
Watchdog Relay Rating:	30 V DC 200mA max

### RS-485 & UniBus Parameters

UniBus In-Cabinet Expansion:	Up to 6 UniBus devices
RS-485 Sub-LAN:	Up to 250 RS-485 Sub-LAN Modules (maximum of 99 of any one type)

### Current Consumption

AC Source	JP5 Setting	Total Current Limit	Static Controller Current	Battery Capacity	Max Ancillary Current
1.5A Plug Pack:	Not shorted	1.3 Amp	275mA	7 AH	700mA
Transformer / AC-DC Adapter:	Shorted	2.2 Amp	275mA	7 AH	1.2A
Transformer / AC-DC Adapter:	Shorted	2.2 Amp	275mA	18 AH	480mA

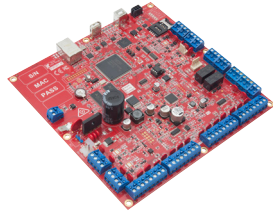
### Compliance

Electrical		
Environmental		

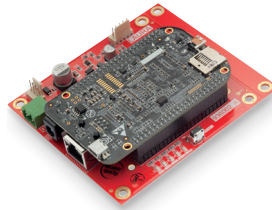
## Ordering Options



**996001IPAUPS**  
Integriti ISC in Medium Enclosure

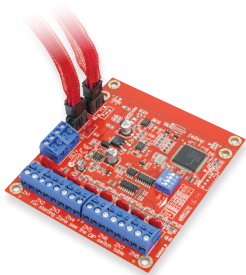


**996001IPAUPCB&K**  
Integriti ISC PCB & Accessories

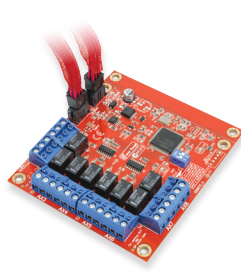


**996002L5**  
Level 5 User Expansion Kit for  
ISC/IAC (one million users)

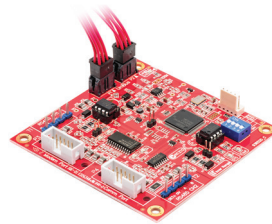
## Ordering Options - UniBus Devices for ISC



**996500PCB&K**  
Integriti UniBus 8 Zone Input  
Expander PCB & Accessories  
(Includes 270mm UniBus patch cable)



**996515PCB&K**  
Integriti UniBus 8 Relay Auxiliary  
Expander PCB & Accessories  
(Includes 270mm UniBus patch cable)



**996520PCB&K**  
Integriti UniBus 2 Port RS-232/  
RS-485 UART PCB & Accessories  
(Includes 270mm UniBus patch  
cable)



Spare UniBus patch cables  
**996791SS** - UniBus Patch Cable 150mm  
**996791S** - UniBus Patch Cable 220mm  
**996791L** - UniBus Patch Cable 270mm  
**996791LL** - UniBus Patch Cable 475mm  
**996791XL** - UniBus Patch Cable 675mm