

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.



	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	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

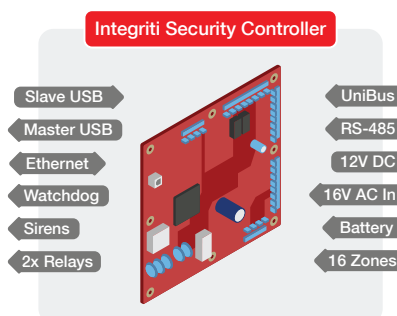
Main Controller Features

- 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

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

Connectivity

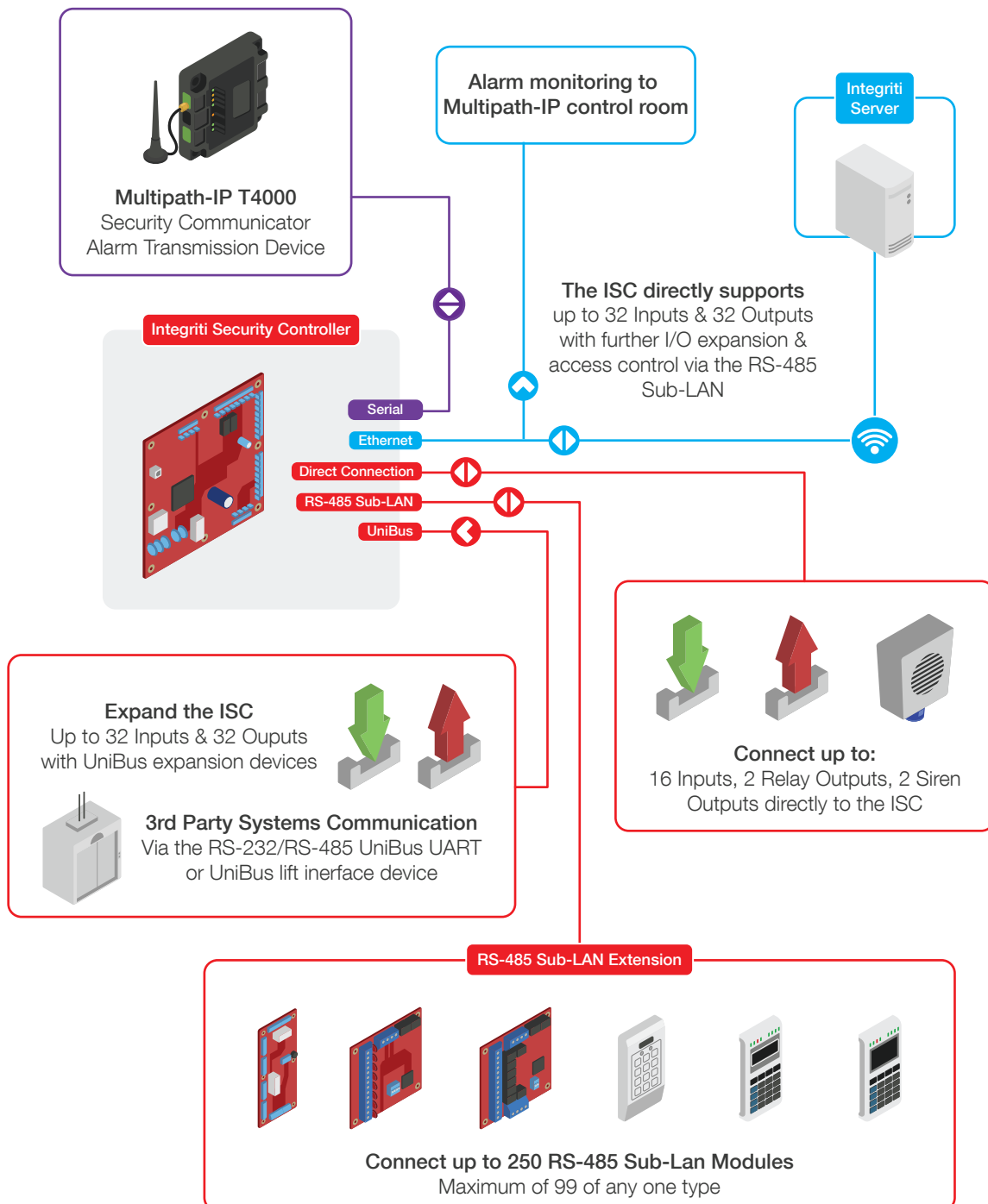


Hardware Expansion Capabilities

- 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
- Dashboard User Capacity - 100,000 - 1,000,000 with User Expansion Kit fitted

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:	100-240V AC 50/60 Hertz
AC-DC Adapter Output Voltage:	24V 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 24V DC
Battery Charger Output:	13.75V DC -0.15/+0.5 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 10.4V +/-100mV. Restores at 12.4V +/- 100mV
LAN*POS* & DET+:	Output Voltage: 13.75V DC -0.15/+0.5 V (When AC power Present)
LAN*POS* & DET+ Smartfuse trip current:	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:	30V DC 1A max
Watchdog Relay Rating:	30V 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	Max Ancillary	
					Capacity	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	

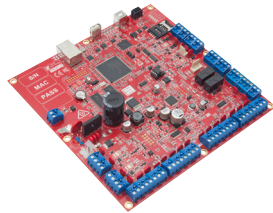
Compliance

Electrical	
Environmental	

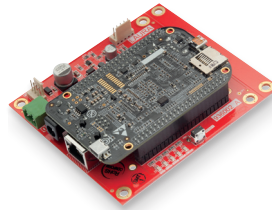
Ordering Options



996001IPAUPS
 Integriti ISC in Medium Enclosure

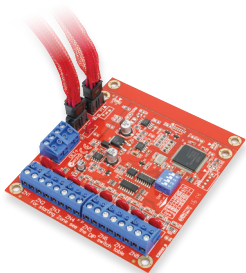


996001IPAUPCB&K
 Integriti ISC PCB & Accessories

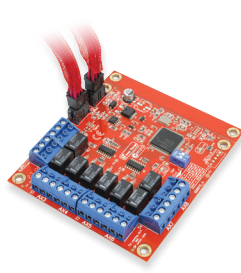


996002L5
 Level 5 User Expansion Kit for
 ISC/IAC (one million users)

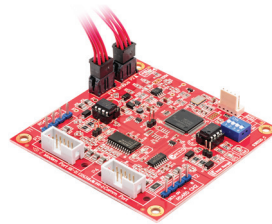
Ordering Options - UniBus Devices for ISC



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