An IP based master controller for the Integriti modular hardware system

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, modem and internal & external siren outputs, the ISC can be used both stand alone or expanded further via its UniBus and RS-485 Sub-LAN ports. The flexible, modular design of the ISC's system parameters and Sub-Lan architecture allows a single stand alone controller to be expanded to form a network of RS-485 expansion modules of up to 100,000 Users, 3,000 Zone Inputs, over 3,000 thousand Outputs, 250 Areas/ Zone Partitions and over 1000 card readers and 240 Doors.



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.

	Doors	Users	Zones	Review Events
No or L0 Smart Card	16	200	100	10,000
Level 1	40	2,000	200	20,000
Level 2	80	10,000	600	30,000
Level 3	160	65,000	2,000	60,000
Level 4	240	100,000	3,000	100,000

Key Features

ISC On board 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
- Dedicated Watch Dog Output
- Dedicated Tamper Input
- Internal & External Siren Outputs
- RJ-12 PSTN Dialler/Modem Connection
- 6 Terminals supplying 13.75VDC Detector Power
- Intelligent Power Control via Smart Fuses
- 32 Bit ARM CPU with Real Time Clock • 64 MB RAM
- 2 GB Micro SD Memory
- Smart Card Slot (Smart cards are used for setting system dimensions)
- Firmware Upgrade via USB, LAN or Software

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 240 via RS-485 Sub-LAN
- Readers Expandable to 1,584 via RS-485 Sub-LAN
- On board Users Expandable to 100,000
- On board Review Events Expandable to 100,000
- Ports RS-232 / RS-485 Serial Ports Expandable to 8 with UniBus UART

Functionality

- Full security / Intruder Alarm functionality
- Complete range of Access Control functionality
- Comprehensive Building Automation support
- Fully monitored LAN status, AC power, battery condition, cabinet tamper, siren tamper, door status and communications problems on all modules where applicable
- On board diagnostic LED's to assist with commissioning and troubleshooting

Uni-Bus In-Cabinet Expansion

UniBus is an innovative in-cabinet bus which allows the connection of Expansion devices, Communications devices and Door & Reader expansion devices on a common Plug & Play bus.

UniBus is built on the highly reliable CANBus technology and replaces the need for ribbon cables and specialised connectors. Up to six UniBus devices can be daisy chained to a UniBus host module.

Uni-Bus Compatibility

		Host Modules			
		ISC	IAC	8 Zone Exp	ILAM
	8 Zone Exp	2	0	3	0
dules	8 Relay Exp	4	4	4	2
Unibus Modules	16 Floor Lift	6	6	6	6
Unibu	2 Door Exp	0	3	0	3
	2 Way UART	4	4	0	0

Services Connectivity to Integriti Software

 SkyTunnel® Cloud Services & Smart Phone connectivity

Ethernet Connected

- Automation Interface-BMS / HVAC Integration
- EMS / Lift Access Control Integration

Physical					
PCB Dimensions:	200(L) x 200(W) x 45(D) (mm)				
Weight:	8.2 k.g. (Includes mains transformer, 7AH battery and cover)				
Installation Environment:	0°C - 40°C @15% - 85% Relative humidity (non-condensing)				
Cabinet Battery Bracket:	To suit 12V 7AH sealed lead acid battery				
Electrical					
Power Supply Type:	Туре А (EN50131-1)				
Transformer Input Voltage:	240V AC -10% / +10%. 50Hertz				
Transformer Output:	16.5V AC. 50 Hertz				
Current Consumption:	Maximum 500 milliAMPs from 240V AC Source				
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				
Battery Charger Output:	13.75V DC -0.15/+.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/+.05 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)				
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	275 mA	7 AH	700 mA
Transformer:	Shorted	2.2 AMP	275 mA	7 AH	1.2 A
Transformer:	Shorted	2.2 AMP	275 mA	18 AH	480 mA
Compliance	2	/ 000			
Electrical	C A C				
Environmental	RoHS				

Enclosure Options

Code#	Description
21001	Integriti - Security Controller - Standard Cabinet
21002	Integriti - Security Controller - Large Cabinet
21003	Integriti - Security Controller - Mega Cabinet

Code# 21000 Integriti Security Controller Data Sheet February 2015 The specifications and descriptions of products and services contained in this data sheet were correct at the time of publishing. Inner Range reserves the right to change specifications or withdraw products without notice.