## An IP based master controller for the Integriti modular hardware system

Ethernet Connected

SkyTunnel® Cloud

Automation Interface-

· Connectivity to Integriti

Services & Smart Phone

BMS / HVAC Integration

• EMS / Lift Access Control

Services

Software

connectivity

Integration



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.

## 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-
- 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	
Unibus Modules	8 Zone Exp	2	0	3	0	
	8 Relay Exp	4	4	4	2	
	16 Floor Lift	6	6	6	6	
	2 Door Exp	0	3	0	3	
	2 Way UART	4	4	0	0	

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 (ЕN50131-1)						
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 RoHS							
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.