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.