

Infinity

IDX 851 Intrusion Detection Unit

The *Infinity* IDX 851 is a programmable, modular, intrusion and alarm controller capable of digital and analog monitoring. Universal inputs monitor up to four alarm zones, and four relay outputs can be programmed to provide local alarm annunciation and control. The IDX 851's universal inputs are also capable of digital and analog monitoring for temperature, humidity, and other analog alarm sensors.

The IDX 851 is a true stand-alone, microprocessor-based controller — the unit will continue to monitor its inputs, control its outputs, and store alarms even when communications are lost. When communication is restored, all alarms are sent to the operator workstations for global annunciation.

The IDX 851 is available in an open class version, suitable for panel mounting. Input power is 24 VAC. An on-board lithium battery provides up to 10 years backup of the controller's memory.

COMMUNICATIONS

Communication to the *Infinity* IDX 851 is handled via the Infinet bus, a twisted pair, half duplex RS-485 interface. Communication is accomplished with a token passing protocol which provides full transparent data transfer between all *Infinity* controllers on the network.

Up to 254 IDX 851s can be networked with the *Infinity* CX family of controllers. On the smaller CMX network controllers, up to 64 IDX 851s may be connected. Other *Infinity* controllers such as the ACX 780 and ACX 700 access controllers, LCX 890 lighting controllers and DCX 250 Touch Screen Display can be networked across the Infinet for a truly integrated system.

INPUTS

The *Infinity* IDX 851 contains 4 universal inputs. Each input is software-selectable between the following point types: digital (on/off), analog (0-5 VDC, 4-20 mA), temperature (-30F to 230F), or pulse counter (0-4Hz). Up to 16 additional digital inputs can be added through *Infinity* EMX 160 expansion modules.



FEATURES

- Stand-alone Controller for Reliable Intrusion Detection
- Peer-to-Peer Communications Provide Transparent Data Transfer
- *Plain English*™ Language Simplifies Programming
- Software-Selectable Universal Inputs Monitor Up to Four Zones
- Four Relay Outputs for Alarm Annunciation and Control
- Battery Backup For Ten Years Accumulated Power Failure of RAM Memory

OUTPUTS

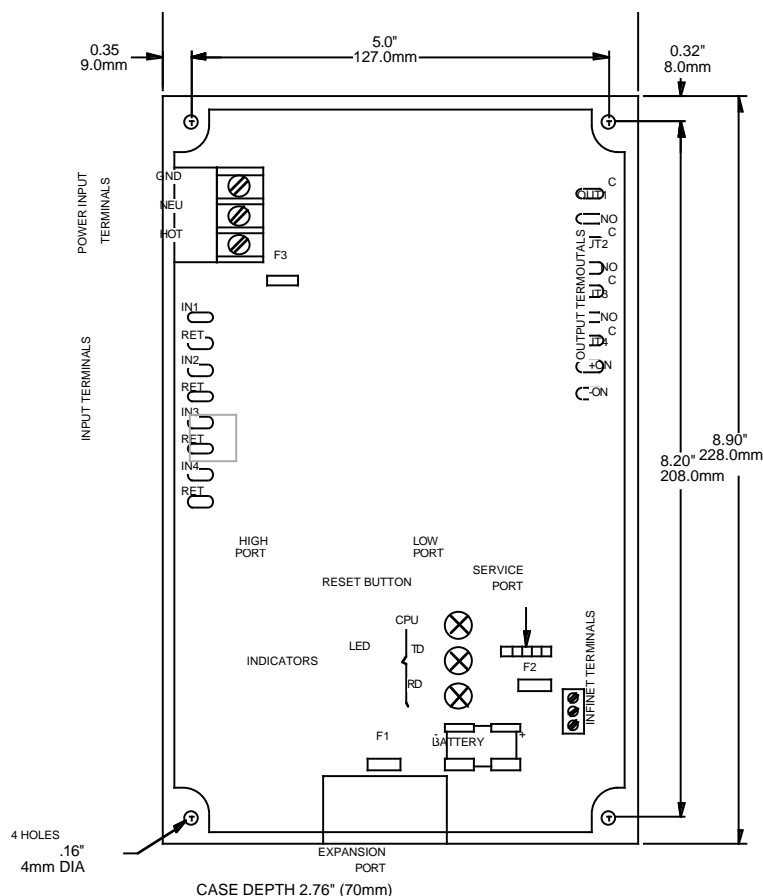
The *Infinity* IDX 851 contains three Form A relays and one tri-state relay, rated for 5 amps, 24 VAC/DC. Up to 4 additional digital or analog outputs can be added through *Infinity* expansion modules, such as the EMX 155 (2 digital outputs).

PROGRAMMING

Every IDX 851 can be configured to meet the exact distributed control requirements of your application using Andover Controls' powerful *Plain English*[™] programming language. Programs can be activated within individual IDX 851s or any network controller. Programs are entered into an IDX 851 using an SX 8000 workstation, the LSX 280 Lap-Top Service Tool, or network controller. The program is then stored in, and executed by, the IDX 851.

SOFTWARE CAPABILITIES

Fully prompted input and output point configuration forms make defining alarm zones easy. Custom programs can be written in Andover's powerful *Plain English* language to control the four relay outputs for local alarm annunciation, elevator control, gate control, low-voltage lighting control, or any specified sequence. Intrusion alarm zones can be configured to automatically arm based on a schedule, keypad entry, card swipe, or combination of any of the above. Built-in trending features allow inputs and outputs to be logged over time and displayed for accurate alarm analysis.



IDX 851 Dimensional Drawing

SPECIFICATIONS

ELECTRICAL

Power:	24 VAC, 50/60 Hz
Power Consumption:	20 VA
Overload Protection:	Fused with 2 amp pico fuse. MOV protected.
Software Real-Time Clock:	Synchronized through Infinet by CX or CMX Network Controller.

MECHANICAL

Operating Environment:	32 to 120°F (0 to 49°C), 10 to 95% RH (non-condensing)
Size:	9 " H x 5 3/4" W x 2 3/4" D (228.6H x 146.0W x 69.8D)mm
Weight:	3.0 lbs. (1.4 kg)
Enclosure Type:	UL open class, IP 10

BATTERY

Battery Backup:	Replaceable, non-rechargeable, lithium battery. Provides 10 years typical accumulated power failure backup of RAM memory.
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COMMUNICATIONS

Communications Interface:	Through Infinet field bus to <i>Infinity</i> CX or CMX Network Controllers or Lap-Top Service Tool.
Communications Speed:	1200 to 19.2k baud
Bus Length:	4,000 ft. (1,220m) standard for Infinet, InfiLink amplification module allows extension to longer distances and is required after every group of 32 units on the network.
Bus Media:	Infinet: twisted, shielded pair, approved low capacitance cable
Comm. Error Checking:	International Standard CRC 16

SPECIFICATIONS (Cont'd)

INPUTS/OUTPUTS

Inputs:	4 Universal inputs; digital (on/off); counter (up to 4 Hz at 50% duty cycle); temperature (-30 to +230°F) (-34 to +110°C); voltage (0 - 5.115)
Input Protection:	24VAC or 24 VDC indefinitely on any single channel, ±1500 volt transients
Input Resolution:	5.0 mV
Input Accuracy:	±15 mV (±1°F over range of -10 to +150°F) (±0.56°C over range of -23.3 to 65.6°C)
Outputs:	3 Form A relays (SPST), 1 Form K Tri-state relay
Output Ratings:	24 VAC/DC, 5 amp
Output Protection:	1500 V transients
Output Resolution:	0.1 sec. for pulse width modulation
Expansion Bus:	Interfaces to optional <i>Infinity</i> EMX Expansion Modules

CONNECTIONS

Power:	Three-position barrier strip
Outputs:	Male spade (.250)
Inputs:	Male spade (.250)
Infinet Bus:	Three-position, removable terminal strip

GENERAL

Memory Size:	128K EPROM, 32K RAM, 128 Byte EEPROM
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AGENCY LISTINGS	UL/CUL 916, 1076, FCC, CE
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Andover Controls Corporation
World Headquarters
300 Brickstone Square
Andover, Massachusetts
01810 USA
Tel: 508 470 0555
Fax: 508 470 0946

Andover Controls (Europe) Ltd.
Smisby Road
Ashby-de-la-Zouch
Leicestershire LE6 5UG
Tel: 01530 417733
Fax: 01530 414225

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