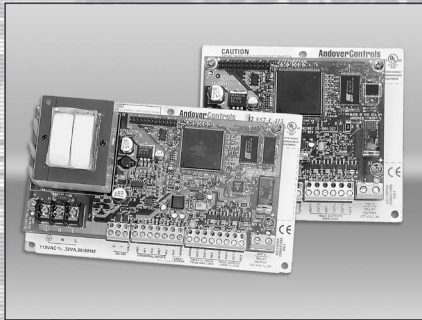


INFINET II



- **Compact Terminal Controller Provides Low-cost Fan Coil and Heat Pump Control**

- **Three Universal Inputs and One *Smart Sensor*/Room Sensor Input**

- **Four Form A Triac Outputs, One Form A Relay, 277VAC @3A**

- **Non-Volatile Flash Memory Provides Utmost Reliability — Stores Both Application Program and Operating System**

- **Flash Memory Allows Easy On-Line Software Updates**

- **Removable Terminal Blocks for Easy Serviceability**

- **View and Modify Information with Optional Andover *Smart Sensor* Display**

- **Local On-Board Service Port**

- **Typical Applications:**
 - Fan Coil Unit
 - Heat Pump
 - Chilled Beams

2887 Series Terminal Controllers

The Infinet II (i2) 887 is a fully programmable, low cost, general purpose terminal controller. It has all the power of an Infinet II controller, but with a small form factor. With its unique mix of three universal inputs, one *Smart Sensor*/room sensor input, four triac outputs and one relay output, the i2887 can be easily configured to control Heat Pumps, Fan Coils, or AC units. Use the i2887 for direct control of fans, staged heating and cooling and monitoring of room temperature, outside air temperature, return air temperature or occupancy status.

The i2887 is compact so it can be installed in tight locations with three mounting screws; and its removable terminal connectors allow for easy servicing.

While the standard i2887 version uses 24 VAC input power, the i2887-L model accepts incoming line voltage at 115 or 230 VAC, has an onboard transformer, and the same versatile I/O configuration.

Similar to all i2 controllers, the i2887 features Flash memory and a fast (32-bit) processor for faster scan times, with plenty of additional memory available for data logging of your critical data.

The i2887 communicates with the entire Andover Controls Infinet™ RS-485 field bus; i.e., both Infinet and Infinet II controllers, and is compatible with *Continuum* CyberStation Version 1.6x or greater. Up to 254 Infinet devices can be networked to any Andover network controller.

INCREASED RELIABILITY WITH FLASH MEMORY

The i2887's non-volatile Flash memory stores your operating system *and* application programs, so that in the event of a power loss, your application will be restored when power is returned. In addition, the Flash memory allows for easy upgrades of your operating system via software downloads, eliminating the need to swap out proms.

INPUTS

The input configuration on the i2887 consists of three full range Universal inputs that accept voltage (0-5VDC), digital (on/off), counter signals (up to 4Hz), or temperature signals. The i2887 also offers a fourth input to support the Andover *Smart Sensor*, or any standard room temperature sensor.

OUTPUTS

The i2887 contains five digital outputs — four Form A Triac-based outputs plus one Form A Relay output, capable of switching line voltage.

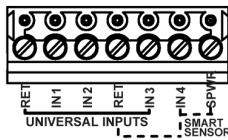
These outputs can be used separately for on/off or pulsed control of lighting, heat, and fan units or can be configured into Form K Tri-state outputs (2-max) for bi-directional control of dampers and valves. (Note: Any two consecutive Triac outputs can be configured as a Form K output.) All Triac outputs are ground referenced and rated for AC loads only.

SOFTWARE CAPABILITIES

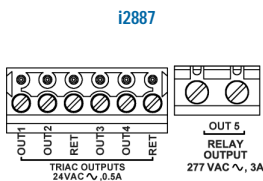
The dynamic memory of the i2887 can be allocated for any combination of programs, scheduling, alarming, and data logging using the powerful Andover Controls *Plain English*[®] programming language. Our object-oriented *Plain English* language with intuitive keywords provides an easy method to tailor the controller to meet your exact requirements. Programs are entered into the i2887 using the *Continuum* CyberStation. Programs are then stored in, and executed by, the i2887.

Programming multiple i2887s is inherently easy with *Plain English*. A complete copy of one i2887's programs can be loaded directly into other i2887s without changing any point names or programs. In addition, channel assignments for the i2887 are similar to other Infinet devices such as the i2851 for easy program conversion.

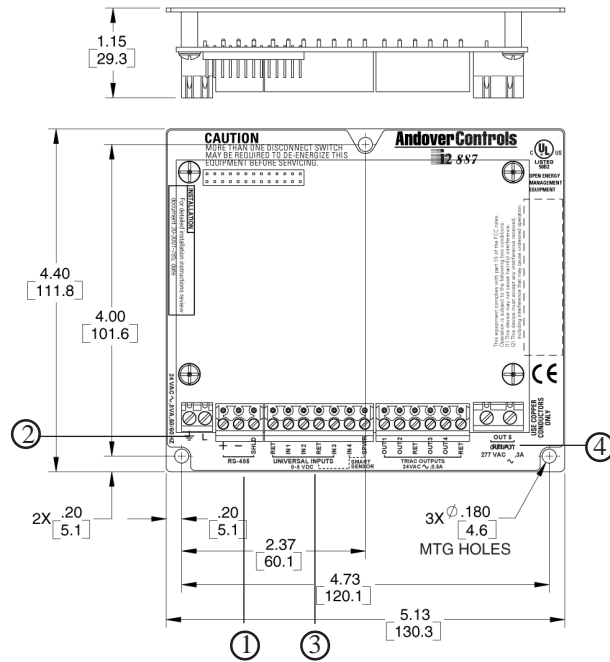
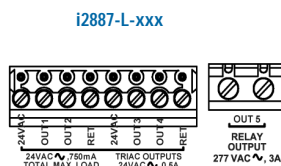
(continued on back . . .)



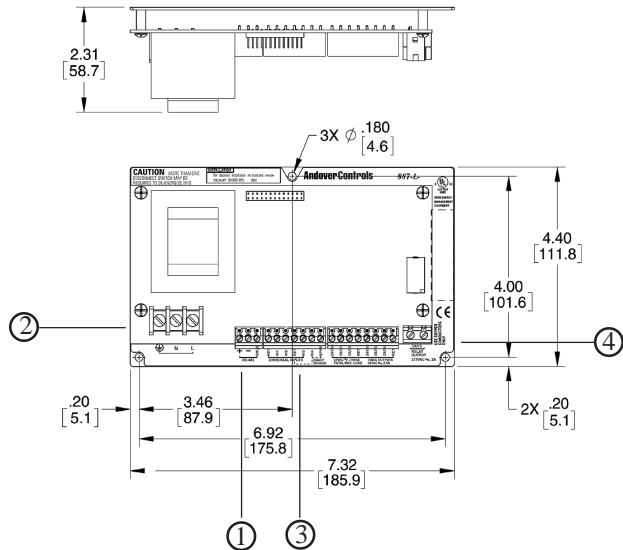
③ Inputs Drawing



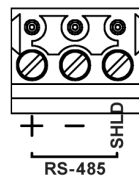
④ Outputs Drawing



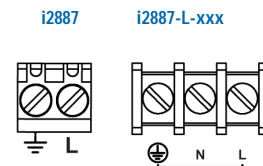
i2887 Dimensional Drawing



i2887-L-xxx Dimensional Drawing



① Communications Drawing



② Power Drawing

SPECIFICATIONS

i2887 Series Terminal Controllers

ELECTRICAL

Power:	i2887: 24 VAC, +10% -15%, 50/60 Hz i2887-L-xxx: 115/230 VAC, +10% -15%, 50/60 Hz
Power Consumption:	i2887: 10 VA i2887-L-xxx: 32 VA
Overload Protection:	Fused with 1 amp fuse. MOV protected.
Software Real-Time Clock:	Synchronized through Infinet by network controller

MECHANICAL

Operating Environment:	32° -120°F (0-49°C), 10-95% RH (non-condensing)
Size:	i2887: 4.40"H x 5.13"W x 1.15"D (111H x 130W x 30D) mm i2887-L-xxx: 4.40"H x 7.32"W x 2.31"D (111H x 186W x 59D) mm
Weight:	i2887: 0.5 lbs. (0.23 kg) i2887-L-xxx: 1.9 lbs. (0.86 kg)
Enclosure Type:	UL Open class
Mounting:	Panel mount

COMMUNICATIONS

Communications Interface:	Through Infinet RS-485 field bus to network controller
Communications Speed:	1200 to 19.2K baud
Bus Length:	4,000 ft. (1,220m) standard for Infinet, i2 Infilink module allows extension to longer distances and is required after every group of 32 units on the network.
Bus Media:	Infinet: twisted, shielded pair, low capacitance cable
Comm. Error Checking:	International Standard CRC 16
Compatibility:	<i>Continuum</i> CyberStation 1.6x or greater

INPUTS/OUTPUTS

Inputs:	3 Universal inputs: Voltage (0-5.115 VDC); Temperature -30°F to 230°F (-34°C to 110°C), Digital (on/off), Counter (up to 4Hz at 50% duty cycle, 125 ms min. pulse width). Current input (0 - 20 mA) using external 250 ohm resistor 1 <i>Smart Sensor</i> Temperature Input (32°F to 105°F) (0°C to 41°C)
Input Voltage Range:	0-5.115 volts DC
Input Impedance:	10K ohm to 5.120V
Input Protection:	24 VAC or 24 VDC temporarily on any single channel, ±1000V transients (Tested according to EN61000-4-4)
Input Resolution:	5.0 mV

INPUTS/OUTPUTS (CONTINUED)

Input Accuracy:	±15mV (±0.56°C from -23°C to +66°C or ±1°F from -10°F to +150°F)
Outputs:	4 single pole single throw (SPST) Form A Triacs (any two consecutive outputs can be configured as one Tri-state Form K) 1 Form A Relay, 277 VAC @3A
Triac Output Rating:	Maximum 0.3A, 24VAC, ±2000V transients (Tested according to EN61000-4-4) Minimum: 30 mA AC Each Triac is ground referenced, DC loads not permitted.
Relay Output Rating:	277 VAC, 3 amp
Output Accuracy:	0.1 sec. for pulse width modulation

CONNECTIONS

Power:	2-position fixed screw terminal connector (i2887-L-xxx: 3-position fixed)
Communications:	3-position removeable screw terminal connector
Inputs/Smart Sensor:	7-position removeable screw terminal connector
Outputs:	6-position removeable screw terminal connector (i2887-L: 8-position)
Relay:	2-position fixed screw terminal connector
Service Port:	4-position connector

USER LEDS/SWITCHES

Status Indicator LEDS:	CPU CPU Active
-------------------------------	----------------

GENERAL

Memory:	512K SRAM, 1MB FLASH
Processor:	Motorola 32-bit Coldfire

MODEL TYPES

i2887:	Power: 24 VAC
i2887-L-115:	Power: 115 VAC
i2887-L-230:	Power: 230 VAC

Note: i2887-L models provide onboard 24 VAC @750 mA for external loads.

AGENCY LISTINGS

UL/CUL 916, FCC CFR 47 Part 15, ICES-003, EN55022, AS/NZS 3548, and VCCI Class A, CE



SMART SENSOR INTERFACE

The i2887 provides a built-in connection for Andover's *Smart Sensor*. The *Smart Sensor* provides a 2-character LED display and a 6-button programmable keypad that enables operators and occupants to change setpoints, balance VAV boxes, monitor occupancy status, and turn equipment on and off. An enhanced version of the *Smart Sensor* is also available with a 4-digit custom LCD that provides the following icons: PM, %, °, Setpoint, Cool, Heat, CFM, Fan, OA, and SP.

Andover Controls Corp. World Headquarters

300 Brickstone Square
Andover, Massachusetts 01810 USA
Tel: +1 978 470 0555 Fax: +1 978 470 0946

Andover Controls Europe

Smisby Road
Ashby-de-la-Zouch
Leicestershire LE65 2UG England
Tel: +44 1530 417733
Fax: +44 1530 415436

Andover Controls Germany

Am Seerhein 8
D-78467 Konstanz
Germany
Tel: +49 7531 99370
Fax: +49 7531 993710

Andover Controls France

Immeuble Dolomites 2
58 Rue Roger Salengro
94126 Fontenay Sous Bois,
France
Tel: +33 1 53 99 16 16
Fax: +33 1 53 99 16 15

Andover Controls Poland

Radzikowskiego 56
31-315 Krakow
Poland
Tel: +48 126385500
Fax: +48 126385501

Andover Controls Asia

Unit 1201-02, Phase 1, Cheuk Nang Centre
9 Hillwood Road,
Tsim Sha Tsui East
Kowloon, Hong Kong
Tel: +852 2739 5497
Fax: +852 2739 7350

Andover Controls Mexico

Insurgentes Sur 1722-501
Col. Florida
Mexico D.F. 01030, Mexico
Tel: +5255 5661 5672
Fax: +5255 5661 5415

www.andovercontrols.com

Andover Controls

WE'RE BUILDING SMART

A Balfour Beatty Company