INFINET II



- Compact Terminal Controller Provides Low-cost DDC Control of Package Units, Heat Pumps, Unit Ventilators
- Compatible with Both Continuum and Infinity Systems
- Universal Inputs with Form A, Form K, and Analog Outputs for Flexible Control Options
- Non-Volatile Flash Memory Provides Utmost Reliability — Stores Both Application Program and Operating System
- Flash Memory Allows Easy On-Line Software Updates
- Modular, Sleek Design Simplifies Installation in Small Areas
- View and Modify Information with Optional Andover Smart Sensor Display
- · Local On-Board Service Port

2867 Terminal Controller

The Infinet II (i2) 867 is a compact terminal controller that provides low-cost DDC control of package units, heat pumps, unit ventilators, and other terminal unit applications. Its versatile mix of I/O — Universal inputs, Triac outputs, plus an interface to Andover Controls' *Smart Sensor* room temperature sensor with programmable keypad — allows for flexible control solutions. The i2867 also features two analog outputs to control reheat valves, dampers, lighting ballasts, etc. And because the i2867 is enclosed in a sleek, modular casing, it can be mounted in a small area — perfect for retrofit applications.

Similar to all i2 controllers, the i2867 features Flash memory, increased user 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 i2867 communicates with the entire Andover Controls Infinet™ RS-485 field bus; i.e., both Infinet and Infinet II controllers, and is compatible with both the *Continuum* CyberStation and *Infinity* SX 8000 front-ends. Up to 254 Infinet devices can be networked to any Andover network controller.

INCREASED RELIABILITY WITH FLASH MEMORY

The i2867'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 additon, the Flash memory allows for easy upgrades of your operating system via software downloads, eliminating the need to swap out proms. The i2867 includes an on-board battery to safeguard your runtime data — protecting all point data and log data from being lost if power is removed.

INPUTS

The input configuration on the i2867 consists of four full range Universal inputs that accept voltage (0-5VDC), digital (on/off), counter signals (up to 4Hz), or temperature signals. The i2867 also offers a fifth input to support the Andover *Smart Sensor*, or any standard room temperature sensor.

Andover Controls

WE'RE BUILDING SMART

OUTPUTS

The i2867 contains five Form A Triac-based outputs. Each Triac is ground referenced. These outputs can be used separately for on/off or pulsed control of lighting, heat, and fan units or be configured into Form K Tri-state outputs (2-max) for bi-directional control of dampers and valves, with a free Triac output remaining. (Note: Any two consecutive Triac outputs can be configured as a Form K output.) Outputs are rated for AC loads only. The i2867 also offers two (0-10V) analog outputs.

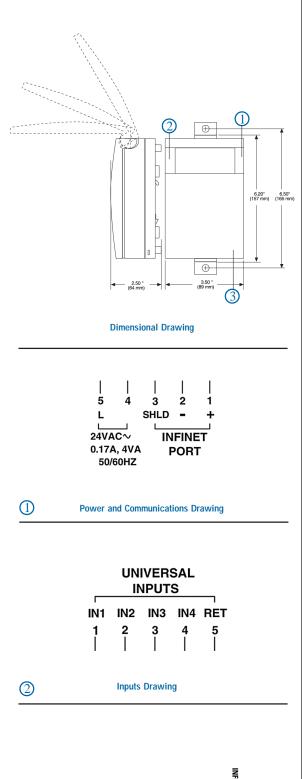
SOFTWARE CAPABILITIES

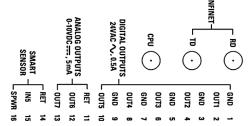
The dynamic memory of the i2867 can be allocated for any combination of programs, scheduling, alarming, and data logging using the powerful Andover Controls *Plain English®* programming language. Our object-oriented *Plain English* language with intuitive keywords provides an easy method to tailor the controller to meet your exact requirements. Programs are entered into the i2867 using the *Continuum* CyberStation, *Infinity* SX 8000 Workstation, or local user terminal. Programs are then stored in, and executed by, the i2867.

Programming multiple i2867s is inherently easy with *Plain English*. A complete copy of one i2867's programs can be loaded directly into other i2867s without changing any point names or programs. In addition, channel assignments for the i2867 are similar to other Infinet devices such as the i2865 for easy program conversion.

SMART SENSOR INTERFACE

The i2867 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.







SPECIFICATIONS

2867 Terminal Controller

ELECTRICAL

Power. 24 VAC, +10% -15%, 50/60 Hz

Power Consumption: 4 VA

Overload Protection: Fused with 2 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: 6.20"H x 3.50"W x 2.50"D

(157H x 89W x 64) mm

Weight: 0.64 lbs. (0.29 kg)

UL Open class, IP 10. Flammability rating of **Enclosure Type:**

UL94-5V

Mounting: Din-rail or panel mount

BATTERY

Battery Backup: Replaceable, non-rechargeable, lithium

battery. Provides 5 years typical accumulated power failure backup of

RAM memory.

COMMUNICATIONS

Communications Interface: Through Infinet RS-485 field bus to

network controller

Communications Speed: 1200 to 19.2K baud

4,000 ft. (1,220m) standard for Infinet, i2 Bus Length:

Infilink module allows extension to longer distances and is required after every group of 32 units on the network.

Infinet: twisted, shielded pair, low Bus Media:

capacitance cable

Comm. Error Checking:

Compatibility:

International Standard CRC 16

Continuum CyberStation and Infinity SX

8000 systems

INPUTS/OUTPUTS

4 Universal inputs: Voltage (0-5.115 VDC); Inputs:

> 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 Smart Sensor 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 or 5M ohm with pull-

up resistor disabled

Input Protection:

24 VAC or 24 VDC temporarily on any single channel, ±1000V transients (Tested

according to EN61000-4-4)

Input Resolution:

±15mV (±0.56°C from -23°C to +66°C or Input Accuracy:

 $\pm 1^{\circ}$ F from -10° F to $+150^{\circ}$ F)

INPUTS/OUTPUTS (CONTINUED)

Outputs: 5 single pole single throw (SPST) Form A

Triacs (any two consecutive outputs can be configured as one Tri-state Form K)

2 analog outputs (0-10V)

Output Rating:

For SPST: Maximum 0.5A, 24VAC, ±2000V

transients (Tested according to EN61000-4-4)

Minimum: 20 mA AC

Each Triac is ground referenced, DC loads

not permitted.

 $5\,\text{mA maximum,}\,2\text{K}\,\text{ohm minimum}$ For 0-10V:

impedance, ±1000V transients (Tested

according to EN61000-4-4)

Output Accuracy:

For SPST: 0.1 sec. for pulse width modulation For 0-10V: 50 mV resolution/100mV accuracy

CONNECTIONS

Power/Communications: 5-position removeable screw terminal

connector

5-position removeable screw terminal Inputs:

connector

Outputs/Smart Sensor: 16-position removeable screw terminal

connector

Service Port: 4-position shrouded connector

USER LEDS/SWITCHES

Status Indicator LEDS:

CPU **CPU Active** TD Transmit Data RD Receive Data

Switches:

Input Pull-up Resistor Switch (per input)

GENERAL

Memory: 128K SRAM, 1MB FLASH Motorola 32-bit Coldfire Processor:

AGENCY LISTINGS

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



OPTIONS

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