

# INFINET II



- **Compatible with Both *Continuum* and *Infinity* Systems**
- **Powerful, Flexible System Controller for the Most Demanding Applications**
- **Expandable I/O Meets Additional Point Count Needs**
- **Non-Volatile Flash Memory Provides Utmost Reliability — Stores Both Application Program and Operating System**
- **Optional Local Display/Keypad Provides Easy Operator Interface**
- **Local, Extended Storage of Log Data**
- **View and Modify Information with Optional *Smart Sensor* Display**
- **Local, On-Board Service Port**

## i2 920 System Controllers

The Infinet II (i2) 920 System Controller is perfect for your most demanding control and monitoring applications with its versatile input/output mix and its ability to add *additional* points using Andover's i2 Expansion Modules.

Designed for control of large Air Handling Units, chillers, boilers, and other mechanical plant equipment, the i2920 features plenty of dynamic memory for application programs as well as for expanded local data logging of critical data. The i2920 also features a fast 32-bit processor, universal inputs, override switches on all outputs, two-piece removeable connectors, and an optional 4-line display with keypad. Similar to other Infinet II controllers, the i2920 has an additional room sensor input, which supports Andover's *Smart Sensor*, or any standard room temperature sensor.

The i2920 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 i2920'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. The i2920 controllers include 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 i2920 series consists of sixteen full range, 12-bit Universal inputs that accept voltage (0-10VDC), digital (on/off), counter signals (up to 4Hz), temperature signals, or supervised alarm circuits for security applications. The i2920 offers an additional input to support the Andover *Smart Sensor*, or any standard room temperature sensor.



# SPECIFICATIONS

## i2920 System Controller

### ELECTRICAL

<b>Power:</b>	115/230 VAC, +10% -15%, 50/60 Hz
<b>Power Consumption:</b>	45 VA
<b>Overload Protection:</b>	Fused with 3 amp fuse. MOV protected.
<b>Real-Time Clock:</b>	Battery-backed real-time clock

### MECHANICAL

<b>Operating Environment:</b>	32°–120°F (0–49°C), 10–95% RH (non-condensing)
<b>Size:</b>	13.00"H x 10.66"W x 2.72"D (330.2H x 270.8 W x 69.0 D) mm
<b>Weight:</b>	3.5 lbs. (1.58 kg)
<b>Enclosure Type:</b>	UL Open class, IP 10. Flammability rating of UL94-5V
<b>Mounting:</b>	Panel mount

### BATTERY

<b>Battery Backup:</b>	Replaceable, non-rechargeable, lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory
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### COMMUNICATIONS

<b>Communications Interface:</b>	Through Infinet RS-485 field bus to network controller
<b>Communications Speed:</b>	1200 to 19.2K baud
<b>Bus Length:</b>	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.
<b>Bus Media:</b>	Infinet: twisted, shielded pair, low capacitance cable
<b>Comm. Error Checking:</b>	International Standard CRC 16
<b>Compatibility:</b>	<i>Continuum</i> Cyberstation and <i>Infinity</i> SX 8000 systems

### INPUTS/OUTPUTS

<b>Inputs:</b>	16 Universal inputs: Voltage (0-10 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). Supervised Alarm (single or double resistor). Current input (0 - 20 mA) using external 500 ohm resistor 1 <i>Smart Sensor</i> Temperature Input (32°F to 105°F) (0°C to 41°C)
<b>Input Voltage Range:</b>	0-10 volts DC
<b>Input Impedance:</b>	30.1K ohm to 10V or 5M ohm with pull-up resistor disabled
<b>Input Protection:</b>	24 VAC or 24 VDC temporarily on any single channel, ±1000V transients (Tested according to EN61000-4-4)
<b>Input Resolution:</b>	2.5 mV
<b>Input Accuracy:</b>	±7.5mV (±0.25°C from -23°C to +54°C) or (±0.46°F from -10°F to +130°F)
<b>Digital Outputs:</b>	8 single pole single throw (SPST) Form C relays (Any two consecutive Form C outputs can be configured as one Form K Tri-state)

### INPUTS/OUTPUTS (CONTINUED)

<b>Output Rating:</b>	Maximum 3A, 24VAC/30VDC, ±1500V transients (Tested according to EN61000-4-4)
<b>Output Accuracy:</b>	0.1 sec. for pulse width modulation
<b>Analog Outputs:</b>	8 analog outputs
<b>Output Rating:</b>	0-10 VDC, or 4-20mA per channel
<b>Output Resolution:</b>	0.1V for 0-10V; 0.1mA for 4-20mA
<b>Output Overrides:</b>	Each output is equipped with a manual override switch. Software feedback of the switch position is provided, for display and alarming
<b>Expansion Bus:</b>	Interfaces to optional xP I/O Expansion Modules

### CONNECTIONS

<b>Power:</b>	3-position fixed screw terminal connector
<b>Inputs:</b>	Removable two-piece terminal strip
<b>Outputs:</b>	Removable two-piece terminal strip
<b>Smart Sensor:</b>	Removable two-piece terminal strip
<b>Communications:</b>	Removable two-piece terminal strip
<b>Expansion Port:</b>	6-position shrouded connector
<b>Service Port:</b>	4-position shrouded connector

### USER LEDS/SWITCHES

<b>Status Indicator LEDS:</b>	CPU Active	CPU Active
	TD	Transmit Data
	RD	Receive Data
	Output	Output Status (per output)
	EXPANSION PORT PWR	Power Status
<b>Switches:</b>	RESET	
	Input Pull-up Resistor Switch (per input)	
	Individual Output Override Switches	

### GENERAL

<b>Memory:</b>	1MB SRAM, 2MB FLASH
<b>Processor:</b>	Motorola 32-bit Coldfire

### AGENCY LISTINGS

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



### OPTIONS

UL864, Smoke Control System Equipment, UUKL (i2920-S)

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