



POWERED BY
SEDONA
FRAMEWORK™



15 Point WIFI BACNet/IP & Sedona Controller

Solidyne's SAM-15 is the latest generation Universal Programmable Controllers leveraging BACNet/IP communications standard. Offering WIFI and Ethernet connectivity, along with Sedona wiresheet programming interface.

With (4) universal inputs, (1) digital inputs, (4) Form C relay outputs (4) Triac outputs and (2) analog outputs built-in, the SAM can handle any HVAC application with ease.

Armed with a 1Ghz ARM Cortex-A8 processor, 512mb of RAM and 4GB or on-board memory...The SAM family of controllers are the most powerful in their class.

The IP connectivity of the SAM family of controllers allows them to pull RSS/XML weather data feeds from online sources for real time weather, reducing costs of outdoor air temp/humidity sensors and improving accuracy.

Specifications

Power Requirements

Input Voltage: 23 to 28 VAC 50/60 Hz
Consumption: 10 VA (with USB WIFI module)

Inputs/Outputs

Universal Inputs:

Seven (4) Universal Inputs
Can be independently configured for thermistor*, digital, 0-10vdc or 0-20mA, and RAW.

* Thermistor Inputs are 3k, 10k (type 3) thermistor

Digital Inputs:

Two (1) digital inputs for reading status or pulse meters (dry contact only)

Analog Outputs:

Four (2) 0-10vdc Analog Outputs*.

* Can drive down to 10Kohm loads at 10vdc

Relay Outputs:

Eight (4) Relay Outputs, Form (C) 3 Amp relays with HOA (Hand-Off-Auto) slide switches on-board

Triac Outputs:

Four (4) Triac Outputs (24VAC/1 Amp only)

TECH/DATA SHEET

SAM-15—Universal Controller Revision 2 1/2018

Specifications cont'd:

Operating Environment

Temperature: 32 to 158 F (0 to 70 C) *
Humidity: 20-90% Relative, noncondensing **

* Storage Temperature: -10 to 158 F (-23 to 70 C)

** Storage Humidity: 0-95% Relative, noncondensing

Network Communication

Method: Ethernet or WIFI
Protocols: BACNet/IP, Sedona, SMTP, NTP, SSH, SFTP
WIFI Standards: 802.11 a/b/g/n

Physical Dimensions

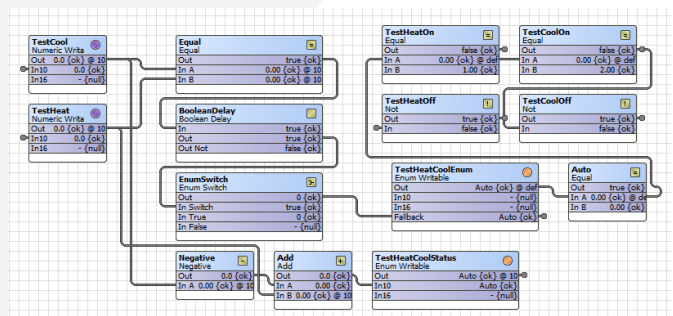
Height: 70 mm (2.75 in)
Width: 78 mm (3.0 in)
Length: 160 mm (6.3 in)
Mounting Holes: 148.5 mm (5.85 in) Center to Center
Weight: 1.2 lb

Agency Approvals

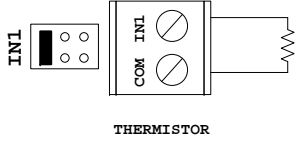
Listed Device: UL Listed under E76576 24G9



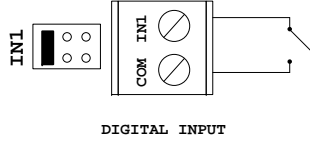
Pending: BACnet Testing Laboratories (BTL)



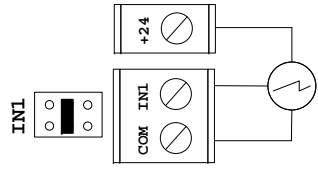
WIRING EXAMPLES:



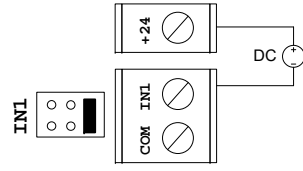
THERMISTOR



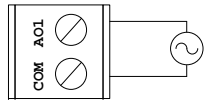
DIGITAL INPUT



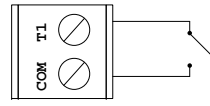
0-10V INPUT



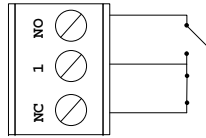
0-20MA INPUT



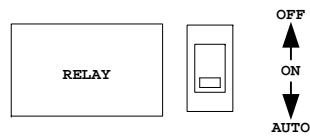
ANALOG OUTPUT



TRIAC OUTPUT
(24VAC ONLY)

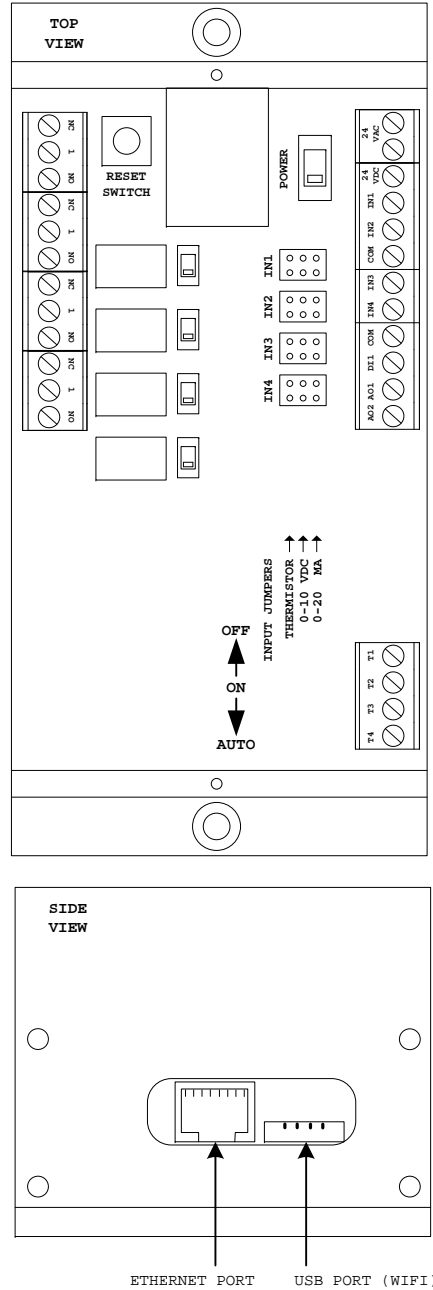


RELAY OUTPUT



OFF
ON
AUTO

- NORMALLY CLOSED 1
- RELAY 1 (FORM C, 3 AMP) 2
- NORMALLY OPEN 3
- NORMALLY CLOSED 4
- RELAY 2 (FORM C, 3 AMP) 5
- NORMALLY OPEN 6
- NORMALLY CLOSED 7
- RELAY 3 (FORM C, 3 AMP) 8
- NORMALLY OPEN 9
- NORMALLY CLOSED 10
- RELAY 4 (FORM C, 3 AMP) 11
- NORMALLY OPEN 12



- 1 24VAC HOT
- 2 24VAC NEUTRAL
- 3 +24 VDC OUTPUT (500mA)
- 4 INPUT 1 (THERMISTOR, 0-10VDC, 0-20mA)
- 5 INPUT 2 (THERMISTOR, 0-10VDC, 0-20mA)
- 6 I/O COMMON
- 7 INPUT 3 (THERMISTOR, 0-10VDC, 0-20mA)
- 8 INPUT 4 (THERMISTOR, 0-10VDC, 0-20mA)
- 9 I/O COMMON
- 10 DIGITAL INPUT 1 (DRY CONTACT, PULSE)
- 11 ANALOG OUTPUT 1 (0-10VDC)
- 12 ANALOG OUTPUT 2 (0-10VDC)

- 21 TRIAC OUTPUT 1 (24VAC ONLY)
- 22 TRIAC OUTPUT 2 (24VAC ONLY)
- 23 TRIAC OUTPUT 3 (24VAC ONLY)
- 24 TRIAC OUTPUT 4 (24VAC ONLY)