The Zonex Systems Stand Alone Modulating thermostat, SAMOD, is a microprocessor based, auto changeover thermostat, that includes a duct sensor and a fully modulating damper to control problem areas (with erratic temperatures) by controlling the existing air supply to the problem area or zone. The SAMOD is used in stand alone damper applications where independent sub control is required. The SAMOD does not control or cycle the HVAC equipment.

The space ambient temperature is continuously displayed on the SAMOD. An accurate duct sensor is included with the SAMOD and installed upstream of the damper. For Auto changeover operation the duct temperature is compared to the room ambient for changeover. If the supply air temperature is $3^\circ$ F or less than room ambient, the SAMOD recognizes that cooling air is available for the zone. If the supply air temperature is $7^\circ$ F or warmer than the room ambient, the SAMOD has warm air available for heating the zone. The damper will modulate to maintain room temperature based on variance from set point.

If no heating or cooling calls exist, and duct temperature is within $10^\circ$ dead band, ($3^\circ$ below room temperature or $7^\circ$ above room temperature), SAMOD will modulate the damper to provide continuous ventilation.

By holding the DUCT button on the SAMOD, duct temperature readings will be displayed at the thermostat providing current temperature information and set points. In the event of power loss, the set points are stored in a non-volatile memory, without need for battery backup.

The SAMOD is equipped with an Auxiliary contact to control a supplemental heating source, such as baseboard, radiant, duct heater or VAV box. The second stage is activated from the thermostat when the room temperature falls $2^\circ$ below the heat set point.

**NOTE:** An air proving switch (field supplied) must be used for reheat applications. A field supplied relay may be required for VAV box applications.

A Remote Sensor is available for the SAMOD. The RS option allows a Remote Sensor to be located up to 200’ from the thermostat, using standard 18 GA thermostat wire.

**TECHNICAL DATA**

**Electrical:**
- **Supply Voltage:** 24vac
- **Power consumption:** 2 VA maximum (4 VA maximum w/ STMPD damper)
- **Inputs:**
  - 24vac
  - NTC Thermistor
  - Duct Thermistor
- **Outputs:** 2 - triac, 24vac @ 2.5 VA

**Environmental:**
- **Operating temperature:** 30 to 140$^\circ$ F (-1 to 60$^\circ$ C)
- **Operating humidity:** 5-95% non-condensing
- **Storage temperature:** 0 to 150$^\circ$ F (-18 to 66$^\circ$ C)

**General:**
- **Dimensions:** 3 1/2” H x 4 1/2” W x 3/4” D
- **Range:** 45 - 95$^\circ$ F.
- **Accuracy:** +/- 0.8$^\circ$ F.
- **Memory:** Non-volatile EEPROM
- **Display:** 128 x 64 Graphic LCD

Rev 3/27/19
**FEATURES**

- Auto changeover with single set point for easy end user operation
- No batteries required
- Attractive, compact design
- White color
- Accurate temperature control
- Large LCD display
- Set point Lock
- Easy to adjust or calibrate
- Ability to switch off – driving damper to closed position
- Non-volatile memory: Retains stored set points
- Remote sensor capability
- Displays duct temperature
- Duct sensor included
- F° or C° temperature operation
- Auxiliarity or Reheat operation
- Slave up to 3 dampers

**ORDERING INFORMATION**

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<tr>
<th>Part No.</th>
<th>Description</th>
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<tr>
<td>SAMOD</td>
<td>Stand alone modulating damper thermostat with duct sensor</td>
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<tr>
<td>SAMODRS</td>
<td>Stand alone modulating damper thermostat, with duct and remote sensor</td>
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