

ULTRA-ZONE[®]

Forced Air Zone Controls

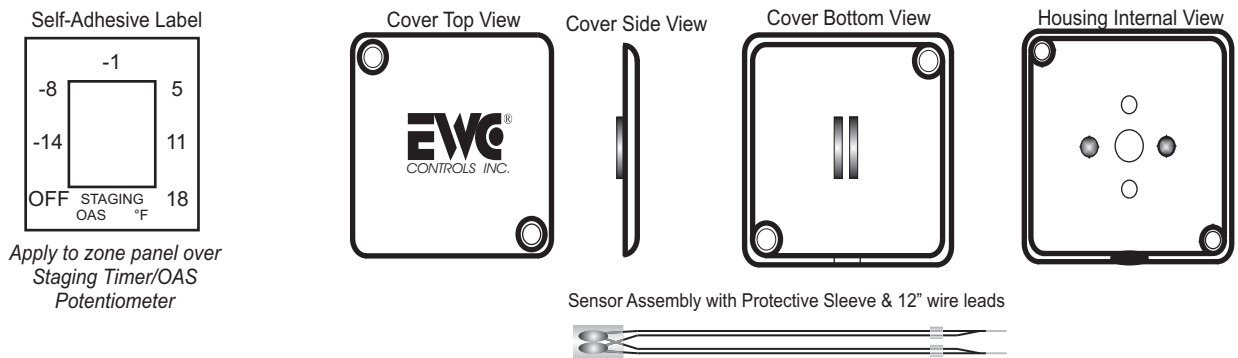
SUBMITTAL SHEET

Model OAS-GT – Outside Air Sensor for Geothermal Systems

The Model OAS-GT Outside Air Sensor allows precise real time monitoring of the Outside Air temperature on your Zoned Geothermal HVAC system. The OAS-GT consists of dual 10k Thermistors factory wired in parallel which wire directly into the **BMPlus series or UZC series** control panels allowing the Control System to monitor the outside air temperature in heating mode for very-cold climates. Using the adjustable potentiometer on the Ultra-Zone Control Panel, the installer can set the desired outdoor temperature changeover setting, to engage supplemental or backup heating systems. **The Model OAS-GT CANNOT be used with the Model HK2000 Economizer or Model 072000 Humidistat.**

Make sure the OAS-GT is mounted completely outside of the house, on the North, East, or West side of the building. Avoid direct sunlight. Do not mount the OAS-GT low to the ground where snow can cover it. Do not mount the OAS-GT close to exhaust vents of any type. **Use a dedicated 2 conductor 18 awg solid copper jacketed thermostat cable to connect the OAS-GT to the Zone Control System. Avoid running cable in close proximity to line voltage circuits, or inside a conduit with other circuits. Avoid wire runs in excess of 100 ft.**

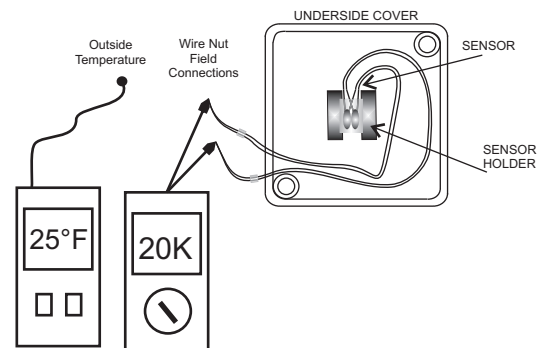
The Sensor wiring is not polarity sensitive. OAS equipped panels have a designated terminal block for the OAS-GT. Be sure to enable the OAS Dip switch. Apply the OAS-GT Potentiometer label to cover the normal Outside Air values. Now dial in the Outside Air Changeover setting you desire. Dual fuel Heat Pumps and Multi-Stage Heating systems can be controlled without the need for bulky mechanical outside air thermostats or expensive dual fuel kits.



TESTING AN OAS-GT

To test an OAS-GT disconnect the wire leads from the control panel. At room temperature (77°F) the ohm reading on an OAS-GT will be approximately 5K ohms (5,000 ohms). Or leave the OAS-GT where it is and place a separate temperature probe of known accuracy in the same location as the OAS-GT and measure the OAS-GT resistance against the table provided below. You should measure a value within 5% of the table value and the separate temperature probe reading.

TEMP. °F	RESISTANCE	TEMP. °F	RESISTANCE
-20	82.6 k	30	17.3 k
-15	69.7 k	35	14.9 k
-10	59.1 k	40	13.1 k
-5	50.1 k	45	11.4 k
0	42.7 k	50	9.95 k
5	36.5 k	55	8.72 k
10	31.3 k	60	7.66 k
15	26.9 k	65	6.74 k
20	24.2 k	70	5.94 k
25	19.9 k	75	5.25 k



SUBMITTAL FORM

SUBMITTED BY: _____
 JOB: _____
 ARCHITECT: _____
 ENGINEER: _____
 CONTRACTOR: _____
 LOCATION: _____



385 Hwy. 33
 Englishtown, NJ 07726
 Ph: 800-446-3110
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P/N 090377A0149 REV. B

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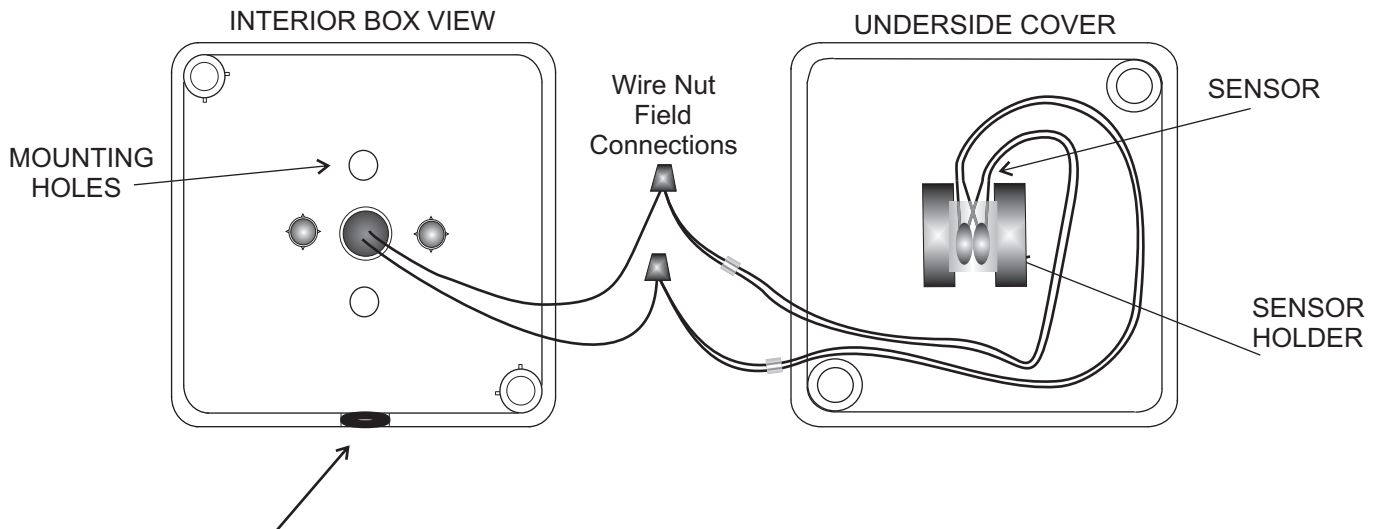
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Choose a suitable location to mount the OAS-GT. The OAS-GT can be configured to mount on an outside wall, simply fasten the box to the outside wall using the two 1/4" hex head self-tapping screws and wall anchors provided. The box should cover the hole penetration made through the wall. Now route 2x18 awg field wire through the center hole and into the box. Press the sensor into the brackets on the underside of the front cover. Use the provided wire nuts to complete the field connections. Place the cover back on and secure it. Now, connect the #18 awg field wires to the OAS terminals on your Ultra-Zone control panel.



NOTE: Orient the box housing with the Wire Entrance hole/Grommet facing down!

