DOMOSAPIENS SENSOR AND SUPPORT MODULE DRIVER FOR APRILAIRE WI-FI THERMOSTATS

This driver enables you to display the temperature/humidity from any sensor or support module (Z10IDT, Z10ODT, 8081, 8082 or 8083) connected to an Aprilaire Wi-Fi Thermostat. It is a companion driver to the Aprilaire Extended Wi-Fi Thermostat driver.

IMPORTANT: OS 2.7 or later is required for this V2 driver to work properly.

This driver records all Temperature Events (when used) in the History Agent under "Comfort", "HVAC". These items are accessible in Composer.

INSTRUCTIONS

- Before you install any instance of this driver, you should install the corresponding thermostat's driver and make sure it communicates properly with the actual thermostat.

- Install one instance of this driver for each sensor you wish to display outside of the main thermostat's controlling temperature/humidity. This could include:

  - The thermostat's built-in Temperature sensor – "**BIT**" (8810 only)
  - The thermostat's built-in Temperature and Humidity sensor – "**BITH**" (other models)
  - The thermostat's wired Remote Temperature sensor – "**WRT**" (T1/T2 – all except 8810)
  - The thermostat's wired Outdoor Temperature sensor – "**WOT**" (T1/T2 for S86WMUPR, ODT or S1/S2 for other models)
  - The thermostat's Return Air Temperature sensor – "**RAT**" (8830/8840 only)
  - The thermostat's Leaving Air Temperature sensor – "**LAT**" (8830/8840 only)
  - The 8056 or Z10ODT Wireless Outdoor Temperature and Humidity sensor – "**WLOTH**" (S86WMUPR/8830/8840 only)
  - ***NEW*** The Z10IDT Wireless Indoor Temperature and Humidity sensor – **"WLITH"** (S86WMUPR only – up to 8 are supported by thermostat)
  - The 8081/8082/8083 Support Modules (up to 4 are supported by 8820/8830/8840). Use one instance of this driver for each individual temperature sensor in 8081 Support Modules (up to 2 sensors per Module) and one instance of this driver for each 8082 or 8083 Module.

  NEW The largest configuration for an **S86WMUPR** thermostat would have 11 instances of this Sensor driver (BITH, WRT or WOT, WLOTH and eight WLITH).

  The largest configuration for an **8820/8830/8840** thermostat would have 14 instances of this Sensor driver (BITH, WRT, WOT, RAT, LAT, WLOTH, first 8081 T1, first 8081 T2, second 8081 T1, second 8081 T2, third 8081 T1, third 8081 T2, fourth 8081 T1, fourth 8081 T2). Alternatively, if only 8082/8083 Support Modules are used, the maximum would be 10 instances (BITH, WRT, WOT, LAT, WLOTH, first 8082/8083 TH, second 8082/8083 TH, third 8082/8083 TH, fourth 8082/8083 TH). Of

course, a mix and match of 8081 and 8082/8083 is possible. Do not install an instance of this driver for unused sensors.

- Rename each instance with a name meaningful to the Control4 user.
- Connect each driver's APRILAIRE_WIFI connection to the appropriate thermostat.
- The Available Sensors list should be populated automatically by the thermostat. If it is not, check that the thermostat's driver is communicating properly with the thermostat and use the Action 'Refresh Available Sensors'. Select the sensor to be represented by this driver. Only supported sensors are available on the list and if an actual sensor is missing, check the thermostat's installer setup.
- Optionally designate this sensor as the supplier of Outdoor Temperature to the thermostat.
- ***NEW*** Note that the BATTERY_PERCENT variable applies only to the Z10IDT and Z10ODT wireless sensors.
- Connect the Room Selection bindings as appropriate.
- When you are done with all thermostats and sensors, Refresh Navigators.

PROPERTIES

- **Driver Version** displays the version of this driver.
- **Debug Mode** turns Debug Mode On or Off (with output to the Lua Output window).
- **Debug Duration in Minutes** sets the duration of Debug On.
- **Driver Information** displays various status messages about the driver.
- **Use as Outdoor Temperature** allows you to specify that this sensor is to be used as the source of outdoor temperature for the connected thermostat. You would typically use this for the "**WOT**" or "**WLOTH**" sensors, but any other sensor may be used for outdoor temperature, including Support Modules. **IMPORTANT**: specify 'Yes' no more than once in the project.
- **Available Sensors** contains the list of sensors available from the connected thermostat and allows you to select which sensor this driver will represent. If this list is incomplete, verify that the thermostat driver is communicating properly with the thermostat and use the Action 'Refresh Available Sensors'.
- **Temperature Events** allows you to specify if events are used and what will be the baseline temperature.
- **Temperature Event x Delta** allows you to specify up to four deltas where an event will be triggered if the actual control (room) temperature is too far (higher or lower) from the baseline specified in the Temperature Events property. The deltas may range from -20 to +20 and should be specified in

the thermostat's current scale. Example: 6 will trigger the event when the room temperature exceeds the baseline by 6 degrees or more. Only the highest delta (positive or negative) will be triggered. You may specify up to 4 Events, in any order and set an Event to 0 to disable it.

Informational Properties **for this sensor driver:**

- **Connected to Thermostat** displays the name and model of the connected thermostat.
- **Sensor Type** displays the type of sensor previously selected using the 'Available Sensors' property.

SUPPORT

For support on this driver please go to https://help.drivercentral.io/. Give a detailed description of the problem and also include the version number of the driver and the version of Control4 OS that you are using.

AUTO UPDATE

This driver is updated with fixes and new features from time to time. To ensure your project uses the latest version, set the Automatic Updates property of the thermostat driver to On. If required, sensor drivers will also be updated automatically.

CHANGELOG

10.0.0	November 7, 2018	Initial Release
10.1.0	January 1, 2019	Improvements on handling Outdoor Temperature
11.0.0	May 3, 2019	Infrastructure update
12.0.0	November 16, 2023	Added support for new S86WMUPR thermostat sensors
12.0.1	November 30, 2024	Fixed unexpected deactivation by thermostat driver
12.0.3	August 11, 2025	Memory issue addressed