



Meritage IAQ Controls

Features & Benefits



Model
8840M
Shown
(Primary
thermostat)



Model 8810M (Secondary thermostat)

Universal 2H/2C or 4H/2C HP
Event-Based™ Air Cleaning
Wi-Fi



Model 8840M

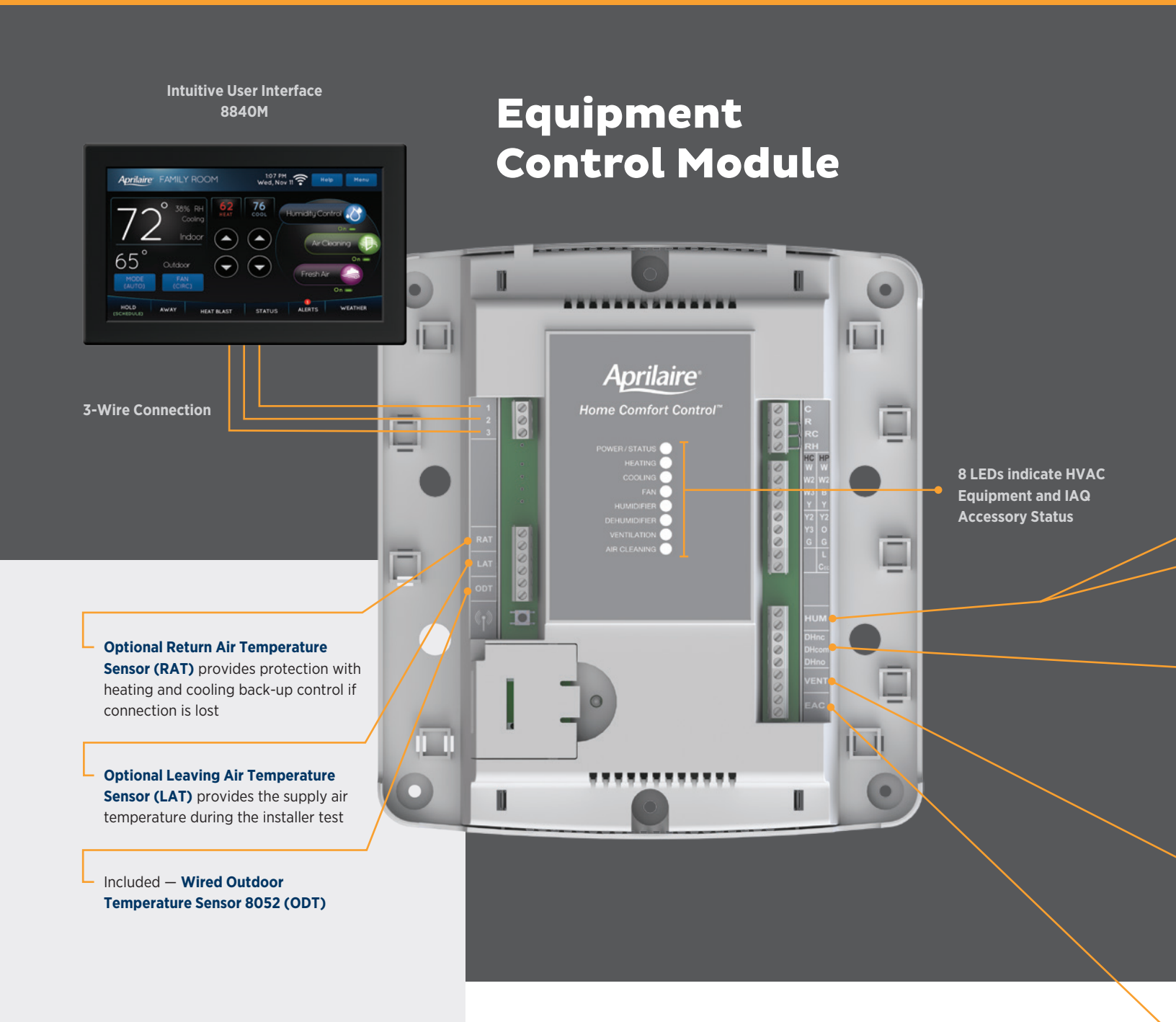
Universal 3H/3C or 4H/2C HP
Event-Based™ Air Cleaning
Humidity and Ventilation
2 Part—3-Wire design
Full Color Wi-Fi touch screen

IAQ Control Features & Benefits

- ✓ Wi-Fi with IAQ Control
- ✓ Integrated Indoor Air Quality Control (Model 8840M)
- ✓ Event-Based™ Air Cleaning
- ✓ Fresh Air Ventilation Code or Comfort mode set-up (Model 8840M)
- ✓ Convenient One-Touch selection between Fresh Air Ventilation modes

- ✓ Color touch screen (Model 8840M)
- ✓ Built-in dual fuel control
- ✓ 3-wire design (Model 8840M)
- ✓ Maintenance reminders
- ✓ Heat Blast™—schedule override (Model 8840M)
- ✓ Works with all major home automation systems





Model 8840M IAQ Control

The Model 8840M IAQ Control Thermostats consist of two components, the User Interface and the Equipment Control Module.

The User Interface, located in the living space, integrates all indoor air quality functions—heating/cooling, humidification/dehumidification, air cleaning and ventilation in one attractive, easy-to-use, touch screen control. The User Interface offers homeowners the ability to easily set all of their IAQ and HVAC products from one location in the living space. The primary screen indicates how to easily activate and control set points. In addition, the display provides the homeowner with confirmation that the equipment is operating at the desired control settings.

Temperature Control

- + Universal Programmable Thermostat—3H/3C Conventional or 4H/2C Heat Pump
- + 7 day 4 events/day or non-programmable
- + Dual fuel operation
- + High and low balance points (must use ODT)
- + Screen lock-out to prevent unauthorized adjustments
- + Adjustable differential for all stages
- + Stage rate control uses equipment run time to control HVAC equipment staging
- + Progressive Recovery feature ensures that the setpoint is reached by the scheduled time
- + Heat Blast™ allows one touch control of heating to raise room temperature 3°F to 5°F

Humidity Control

Humidifier

- + Displays indoor RH on User Interface
- + Notifies when humidifier is active
- + Automatic humidity setpoint adjustment (must use ODT) or Manual Control
- + Water Panel® replacement reminder

Dehumidifier

- + Displays indoor RH on User Interface
- + Notifies when dehumidifier is active
- + Operates whole-home dehumidifier or air conditioner to dehumidify
- + Dehumidifier service reminder
- + Energizes HVAC blower when dehumidifying

Fresh Air Ventilation

- + Provides fresh air with a motorized damper or an ERV/HRV
- + Notifies when ventilation is active
- + Control limits based upon outdoor temperature and RH
- + Can be set up to use ASHRAE 62.2 guidelines or timed ventilation
- + Provides fresh air with a powered Fresh Air Ventilator or Ventilator with Dehumidification
- + Notifies when ventilation is active
- + One-Touch selection for turning fresh air ventilation OFF, or setting fresh air ventilation to Comfort mode (fresh air is limited during extreme outdoor temperatures or indoor RH)

Air Cleaning

- + Event Based™ Air Cleaning—4 selectable air cleaning events
 - Constant Cleaning (24/7)
 - Automatic (30 Min/Hr)
 - Event Clean (3 Hr Cycle)
 - Allergy (24 Hr Cycle)
- + Notifies when air cleaning is active
- + Media replacement reminder
- + Controls EAC with dedicated 24 VAC dry contact

Easy to Install & Maintain

- + Dual fuel operation (auto lockout of compressor w/call for back-up heat)
- + Programmable (or non-programmable)
- + Remote indoor sensor option w/8051/8053 sensors **(Model 8840M)**
- + Temperature offset $\pm 4^{\circ}$
- + High and low balance point control (requires 8052 outdoor temperature sensor)
- + 3H/3C conventional and 4H/2C heat pump **(Model 8840M)**
- + 2H/2C conventional and 4H/2C heat pump **(Model 8810M)**
- + Configurable manual heat/cool or auto changeover modes
- + Configurable for heating only or cooling only operation **(Model 8840M)**
- + Large, easy-to-wire terminal block
- + Adjustable differential for 1st, 2nd, 3rd and 4th stages
- + Service reminders for humidifier, air cleaner, dehumidifier, ventilation **(Model 8840M)**, HVAC

Engineered for Excellence

- + Circulate fan mode
- + Programmable fan
- + Progressive recovery
- + Built-in equipment protection
- + Equipment stage identification **(Model 8840M)**
- + Multiple hold options maximize comfort and energy savings
 - Vacation hold
 - Customizable timed hold
 - Permanent hold
- + Permanent memory—programming, time and date aren't lost during a power outage
- + Heat Blast™ allows one-touch control of heating to raise room temperature 3°F to 5°F
- + 5-year warranty

Easy & Convenient to Use

- + 7" diagonal touch screen **(Model 8840M)**
- + 3.25" diagonal LCD with soft-touch keys **(Model 8810M)**
- + Fully backlit w/constant low intensity light option
- + Exclusive message center (provides feedback and real language instructions) **(Model 8840M)**
- + Displays room temperature, temperature setting and outdoor temperature. Outdoor temperature display requires 8052 sensor (included).
- + "Copy" function for quick and easy programming **(Model 8840M)**
- + Real time clock automatically adjusts for daylight savings time

Dimensions

Model 8840M

User interface

7.1" x 4.4" x 1"

Equipment control module

8.6" x 9.6" x 1.9"

Model 8810M

User interface

5.3" x 4.5" x 1.0"

Accessories

Model 8840M & 8810M

8052 Outdoor Temperature Sensor (Included with Model 8840. Optional with Model 8810)

Model 8840M

8051 Flush Mount Indoor Temperature Sensor

8053 Surface Mount Indoor Temperature Sensor

8081 Temperature Support Module

8082 Temperature and RH Support Module

Return Air Temperature Sensor (RAT) optional sensor provides protection with heating and cooling back-up control if connection is lost

Leaving Air Temperature Sensor (LAT) optional sensor provides the supply air temperature during the installer test

Thermal Specifications

Control range:

Model 8840M

40° to 99°F
(4° to 32°C)

Model 8810M

45° to 99°F
(7° to 32°C)

Display range: 32° to 99°F (0° to 40°C)

Accuracy: $\pm 1^{\circ}\text{F}$ ($\pm .5^{\circ}\text{C}$)

Storage temperature: -30° to 140°F
(-34.4° to 60°C)

Operating humidity: 5% to 90% relative humidity non-condensing

Operating ambient temperature of user interface: 32° to 120°F (0° to 48.9°C)

Operating ambient temperature of ECM: 32° to 158°F (0° to 70°C)

Shipping temperature range: -30° to 140°F (-34.4° to 60°C)

Electrical Specifications

24 VAC powered (18-30 VAC)

1 amp maximum load per terminal

2.5 amp total maximum load (all terminals)

Standard systems gas, oil, electric

Single stage/heat pump/multi-stage

Terminal Designations:

Model 8840M

User interface: 1, 2, 3, T1, T2, RSA, RSB

Equipment control module: 1, 2, 3, RAT, LAT, ODT, C, R, RC, RH, W, W2, W3/B, Y, Y2, Y3/O, G, L, CEQ, HUM, DHNO, DHNC, DHCOM, VENT, EAC

Model 8810M

Equipment control module: RC, R, W, Y, G, C, S1, S2, O/B, L, W2, Y2