

### MODEL 8870 COMMUNICATING THERMOSTAT

The thermostat shall:

- Be one thermostat capable of heat/cool or heat pump, single or multi-stage operation
- Be capable of standalone operation, independent of the thermostat network
- Be capable of controlling space demand requirements by sensing space temperature and determining the heating or cooling demand with a control accuracy of 1 degree
- Be capable of controlling temperature or relative humidity
- Be capable of password protection
- Be backlit with the option to disable back-lighting
- Have field adjustable differential control
- Have field offset capability
- Have the ability to be configured and addressed via a menu-driven interface
- Control dual-fuel heat pumps based upon outdoor high and low balance points
- Display setpoint(s) and room ambient simultaneously with option to hide setpoints
- Have a mode button for selecting heating, cooling or automatic changeover mode of operation
- Have a button to allow the system fan to operate in continuous or automatic mode
- Display multiple remote temperatures
- Be capable of connecting to a remote flush-mount temperature sensor in order to hide the thermostat from view
- Control space temperatures to maintain individual heating and cooling setpoints
- Manufacturer Aprilaire® Model 8870



#### Message Center Display

The message center display consists of 2, 16-character lines each actuated via scroll-through menus selected by the "Message Center's" Up and Down buttons.

Thermostat set-up features:

- Security and lockout settings
- Offset settings
- High low balance for heat pump applications
- Backlight setup
- Programmers using third-party software can send custom messages to this display



#### Main Display

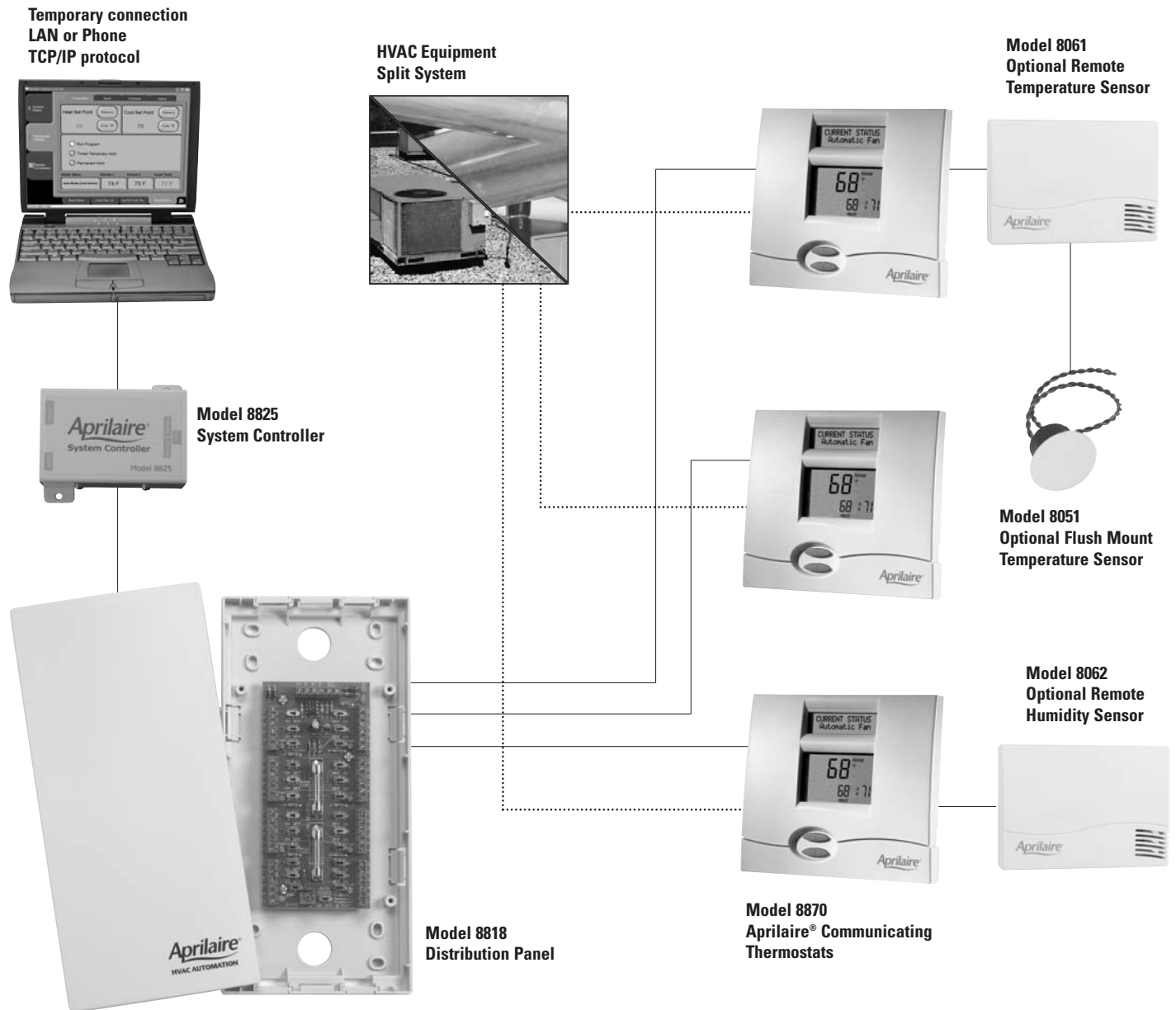
The Model 8870 Thermostat's easy-to-read, backlit main display is designed for optimal viewing. All information about system settings and current conditions is provided including:

- Room temperature
- Mode of operation
- Heat/Cool setpoints
- Fan ON or AUTO
- Network status
- Remote or outdoor temperature (with optional sensor)
- Relative humidity (with optional sensor)

### TECHNICAL SPECIFICATIONS

<b>Control Voltage:</b>	24 VAC +/-20%
<b>Switched Voltage:</b>	18-30 VAC
<b>Maximum Operating Current:</b>	2.0A total at rated voltage, through all outputs/1.0A through any one output
<b>Temperature:</b>	Control Accuracy: +/-1.0° F; Control Range: 40 to 90° F; Operating Range: 32 to 99° F
<b>Humidity:</b>	Control Range: 10 to 90% ± 5% (With optional sensor); Comfort Range: 10-45% ± 3%
<b>Dimensions:</b>	5.01" H x 5.52" W x 1.15" D
<b>HVAC Terminals:</b>	RH, RC, W1, W2, Y1, Y2, G, O B
<b>Communication Terminals:</b>	A+, A- (Transmit terminals); B+, B- (Receive terminals)

# HVAC AUTOMATION SYSTEM APPLICATION



## STAND ALONE APPLICATION



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