



## tekmarNet<sup>®</sup> Thermostat 557

Radiant Floor, 2 Heat Pump/Cool, Backup, Humidity





#### Simplicity & Convenience at the Touch of a Button

The tekmarNet<sup>®</sup> Thermostat 557 is a communicating touchscreen thermostat designed to operate either:

- A hydronic radiant floor with a two stage heat pump (water-to-air or air-to-air) for heating, cooling and an emergency backup heating system; or
- Two stages of heating and two stages of cooling.

There are three auxiliary sensor inputs that can be used to measure room, floor, outdoor, or duct temperature. The optional floor sensor allows precise heating of radiant floors. Relative humidity level can be measured and controlled using either the built-in or external humidity sensor. The large touchscreen display allows you to easily adjust 7-day programmable schedules and room temperatures to optimize comfort and energy savings. The 557 Thermostat can connect to tekmarNet<sup>®</sup> controls using two or four wires or it can operate as a stand-alone device.

### The Best In Heat Pump & Radiant Floor Control

- Radiant floor heating & cooling
- Relative humidity control
- tekmarNet<sup>®</sup> communication
- · Zone synchronization
- Increased equipment efficiency
- Outdoor temperature display

- Indoor temperature feedback
- Programmable schedules
- Optimum start
- Away/vacation mode
- Remote system access
- · Home automation integration

# Introducing humidity control, bringing air & hydronic systems together.





7/8" (28mm)













HVAC Systems

Multi-Staging Alternative Energy

Zoning

Snow Melting Set

Setpoint







# **Sample Application Drawings**

# Heat Pump with Radiant Floor & Electric Backup

The thermostat operates a radiant floor and two-stage air source heat pump. In warm weather, the thermostat operates the heat pump to provide cooling. An outdoor sensor can be used to lock out the air-source heat pump to increase the operational efficiency of the system. In mild weather, the radiant floor can be disabled to allow the heat pump to do the heating. In extreme weather, the backup emergency electric resistance provides heating.



#### Radiant Floor Heating, Second Stage Fan Coil & Humidity Control

The thermostat operates two-stages of hydronic heating and two-stages of cooling. A humidifier and a dehumidifier operate to maintain humidity levels based on a built-in or remote humidity sensor. An outdoor sensor provides cooling lockout and warm weather shut down.



# Building Water-Loop Heat Pump with Radiant Floor Heating

The thermostat operates a water-to-air heat pump to provide heating and cooling as required. The zone valve is activated to allow a water-loop to circulate through the heat pump when in operation. Radiant floor heating is controlled through the thermostat to provide a more comfortable space. Backup electric resistance is available for emergency heat operation.



### For more information on our product line,

visit: www.tekmarControls.com