

# tekmar® Submittal

## tekmarNet® 4 Thermostat 543



Zoning

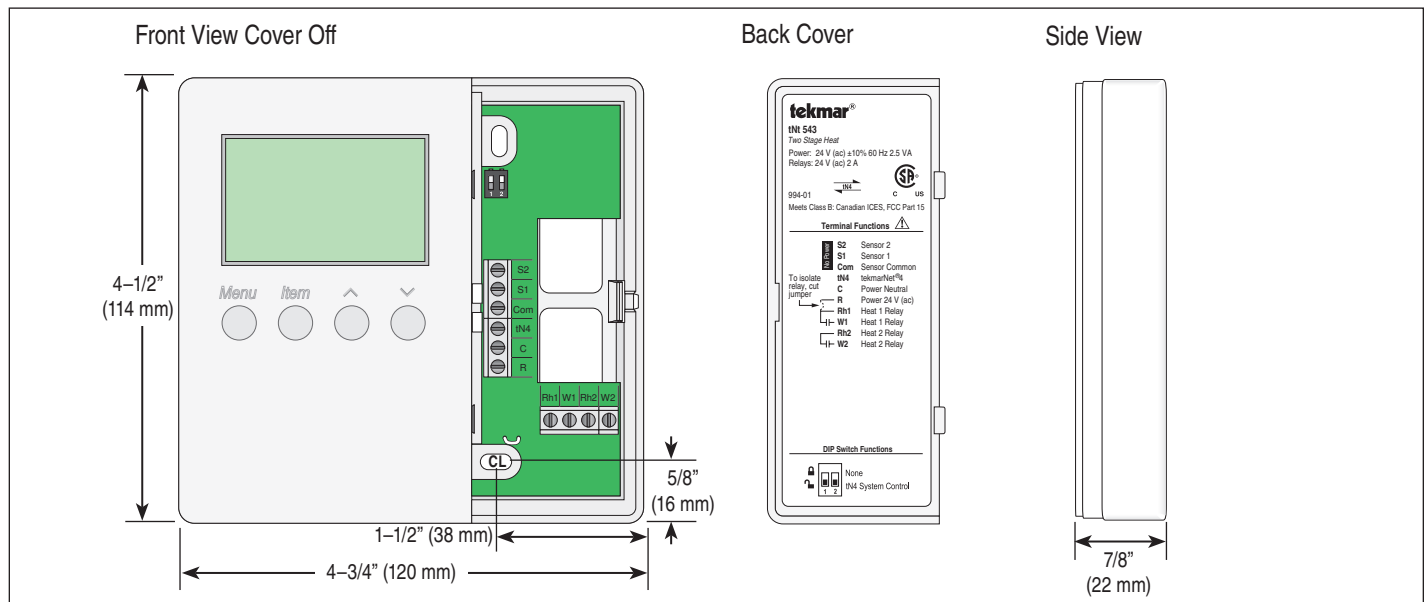
**C543**

01/11

Replaces: New

Job \_\_\_\_\_ Designer \_\_\_\_\_ Contact \_\_\_\_\_

The tekmarNet® 4 Thermostat 543 is designed to operate mechanical equipment to deliver 2 stages of heat to a single zone within a hydronic heating system while maintaining a programmable setback schedule. It can be used with any terminal unit type, including radiant floor, baseboard, fan coils, and non-hydronic sources. This product is capable of controlling 2 zone valves or zone pumps directly or through a tekmarNet® 4 Wiring Center or Zone Manager to maintain air temperature and an auxiliary temperature. This temperature is typically floor, but could also be remote air.



### Specifications

tekmarNet® 4 Thermostat 543 Two Stage Heat	
Literature	D543, W543, J543, U543
Control	Microprocessor PID control; This is not a safety (limit) control
Packaged weight	1 lb. (454 g)
Dimensions	4-1/2" H x 4-3/4" W x 7/8" D (114 x 120 x 22 mm)
Enclosure	White PVC plastic, NEMA type 1
Approvals	CSA C US, CSA/UL 61010-1, meets Class B: ICES & FCC Part 15
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), RH ≤ 80% to 88°F (31°C), down to 50% from 104 to 122°F (40 to 50°C), Altitude <6560 feet (2000 m), Installation Category II, Pollution Degree 2
Power supply	24 V (ac) ± 10% 60 Hz, 2.5 VA, NEC / CEC Class 2
W1 relay	24 V (ac) 2 A
W2 relay	24 V (ac) 2 A
Sensors	NTC thermistor, 10 kΩ @ 77°F (25°C ± 0.2°C) β = 3892
-Included	None
-Optional	tekmar type # 070, 071, 072, 073, 076, 077, 078, 079, 082, 084
Warranty	Limited 3 Year (See D543 for full warranty)

### Energy Saving Features

- Zone Synchronization
- Zone Post Purge
- Programmable setback schedule
- One touch overrides (with optional User Switch)
- Auto Heating Cycle

### Additional Features

- tekmarNet® 4 communication compatible
- Requires 8 wires
- Pulse Width Modulation
- CSA C US Approved for use in USA and Canada
- Outdoor temperature display
- Schedule master
- Cool Group member
- Backlight
- Freeze Protection
- Equipment Exercising
- 2 Auxiliary Sensor inputs

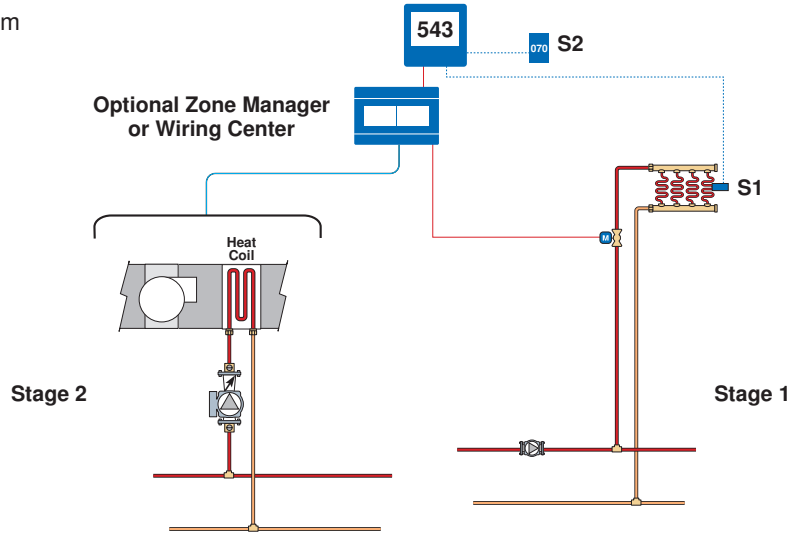
### SPECIAL REQUIREMENTS

This thermostat is designed to be used with a tekmarNet® 4 Wiring Center or Zone Manager for power and communication. It can also be used in stand alone applications.

# Sample Application Drawing

Below is a sample application drawing for this product. This application may include other tekmar products that are required for installation. More sample applications can be found at [www.tekmarcontrols.com](http://www.tekmarcontrols.com).

Sample Mechanical diagram



Sample Electrical diagram

## Legend

S1 = Slab Sensor  
S2 = Outdoor Sensor

