TR20 Series Wall Modules

The TR21, TR22, TR23, and TR24 are a family of direct wired wall modules for use with Honeywell Excel 600, 500, 100, and 80 controllers; Excel 10 W7750, W7751A, W7752, and W7753 controllers; W7761 Controller; and Spyder Unitary Controllers.

- Models available with user selectable setpoint adjustment dials in Fahrenheit, Celsius and Relative Scales
- Models available with occupied/unoccupied override (bypass) with LED
- Models available with 3-position (auto/0/1) or 5-position (auto/0/1/2/3 speed) fan switch
- LONWORKS network jack on all models except the TR21 and TR21-A models
- Models available with on board humidity sensor, humidity output: 0-10 Vdc, 0-5 Vdc, 4-20 mA selectable

Mounting: Wall or standard 2 x 4 inch junction box or on a 60 mm diameter junction box; Vertical mount
Color: White
Operating Humidity Range (% RH): 5 to 95% RH, non-condensing
Setpoint Temperature Range: 55°F to 85°F (13°C to 30°C)
Operating Temperature Range: 45°F to 99°F (7°C to 37°C)
Approximate, Dimensions: 4 13/16 in. high x 3 in. wide x 7/8 in. deep with out knob; 4 13/16 in. high x 3 in. wide x 1 in. deep with knob (122 mm high x 76.5 mm wide x 22 mm deep without knob; 122 mm high x 76.5 mm wide x 26.5 mm deep with knob)

Approvals, Underwriters Laboratories Inc.: UL94-HB plastic enclosure
Approvals, CE: Approved
Approvals, FCC: FCC Part 15, Class B
Used With: Spyder, Excel 600, 500, 100, 80 and Excel 10, 15 Series Controllers; Also used with the T7350 Thermostats

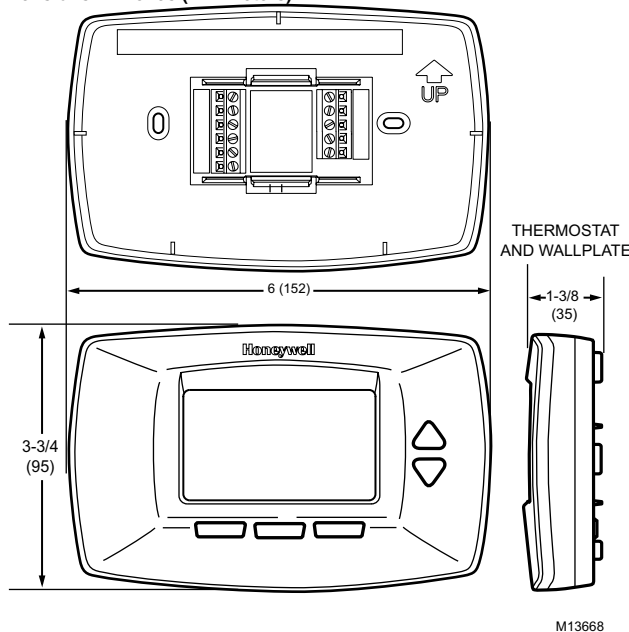| Material Number	Application	Network Communications	Sensor	Switch Positions (Fan)	Shipping and Storage Temperature Range	Comments	Includes
TR21/U	Wall Module Networked Sensor	None	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)		
TR21-A/U	Averaging multiple sensors	None	Unique 10 K ohm non-linear, two 20 Ks in parallel		-40°F to +150°F (-40°C to +65°C)	Special 10K ohm for use only when averaging multiple sensors, can also be used with Thermostats	
TR21-A-US/U	Averaging multiple sensors	None	Unique 10 K ohm non-linear, two 20 Ks in parallel		-40°F to +150°F (-40°C to +65°C)	Meet ARRA Requirements; Special 10K ohm for use only when averaging multiple sensors	
TR21-H/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)		Humidity and LON Jack
TR21-H-US/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)	Meet ARRA Requirements	Humidity and LON Jack
TR21-J/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)		LON Jack
TR21-J-US/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)	Meet ARRA Requirements	LON Jack
TR21-US/U	Wall Module Networked Sensor	None	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)	Meet ARRA Requirements	
TR22/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)		Selectable Setpoint dials in Fahrenheit, Celsius, and Relative (- to +) and LON Jack
TR22-F5/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear	AUTO-OFF-1-2-3	-40°F to +150°F (-40°C to +65°C)		Selectable Setpoint dials in Fahrenheit, Celsius, and Relative (- to +), LON Jack, and 5 position fan
TR22-F5-US/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear	AUTO-OFF-1-2-3	-40°F to +150°F (-40°C to +65°C)	Meet ARRA Requirements	Selectable Setpoint dials in Fahrenheit, Celsius, and Relative (- to +), LON Jack, and 5 position fan
TR22-US/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)	Meet ARRA Requirements	Selectable Setpoint dials in Fahrenheit, Celsius, and Relative (- to +) and LON Jack
TR23/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear		-40°F to +150°F (-40°C to +65°C)		Selectable Setpoint dials in Fahrenheit, Celsius, and Relative (- to +), LON Jack and Override Button with LED
TR23-F3/U	Wall Module Networked Sensor	LonWorks Bus	20 K ohm NTC non-linear	AUTO-OFF-ON	-40°F to +150°F (-40°C to +65°C)		Selectable Setpoint dials in Fahrenheit, Celsius, and Relative (- to +), LON Jack, Override Button with LED and 3 position fan

MultiPRO™ 7000

The MultiPRO™ Multispeed and Multipurpose Thermostat is an effortless, seven-day programmable/non-programmable thermostat that provides universal system compatibility, precise comfort and ease of programming.

- Large, clear display with backlight shows the current and set temperature and time – even in the dark (constant Backlight requires Common Terminal).
- Menu-driven programming make setup effortless.
- Beautiful ergonomic design is smart and sophisticated to match your customers' lifestyle.
- Real-time clock keeps time during power failures and automatically updates to daylight savings.
- Saving Changes notification lets you know when the schedule changes have been saved.
- Change reminders let you know when to replace the batteries.
- Holiday Override options allow you to override the program schedule, as desired.
- Speedy same – schedule programming – no need to copy multiple days.
- Armchair programming allows you to remove the thermostat from the wall for programming.
- Programmable or non-programmable modes.
- Remote setback input for occupancy sensors or timeclocks.
- VersaSpeed™ fan ramping algorithm and fan reset algorithm (fan coil and PTAC applications).
- Up to 3 fan speeds for fan coil and 2 fan speeds for PTAC applications.
- Remote Indoor air sensing option (20K ohm or 10K ohm).

Accessories:
50002883-001/U – Cover Plate Assembly
C7041B2005/U – 20 K ohm NTC Temperature Sensor with 6 in. insertion
C7041B2013/U – 20 K ohm NTC Temperature Sensor with 12 in. insertion
C7041C2003/U – 20 K ohm NTC Temperature Sensor with 18 in. insertion
C7041P2004/U – 20 K ohm NTC Stainless Steel Button Sensor, 11/16 in. dia.
C7089U1006/U – Remote Outdoor Sensor
C7189U1005/U – Remote Indoor Sensor
C7770A1006/U – 6 in. Duct Probe for Return Air 20 K ohm NTC non-linear Temperature Sensor
C7772A1004/U – 20 K ohm NTC non-linear Wall Flush Mount Temperature Sensor without logo
C7772A1012/U – 20 K ohm NTC non-linear Wall Flush Mount Temperature Sensor with Honeywell logo
TR21/U – 20 K ohm NTC non-linear Temperature Wall Module
TR21-A/U – 10 K ohm NTC non-linear Temperature Wall Module for Averaging only
TR21-A-US/U – 10 K ohm NTC non-linear Temperature Wall Module, made in USA
TR21-J-US/U – 20 K ohm NTC non-linear Temperature Wall Module w/ Lon Jack, made in USA
TR21-US/U – 20 K ohm NTC non-linear Temperature Wall Module, made in USA
TR21-WK/U – Wireless Temperature Sensor/Receiver Kit, selectable setpoint, Override
TR21-WKU/U – Wireless Temperature Sensor/Receiver Kit, selectable setpoint, Override, no HW logo
TR21-WS/U – Wireless Temperature Sensor Only, For replacement (Requires a wireless receiver)
TR21-WSU/U – Wireless Temperature Sensor Only, For replacement (Requires a wireless receiver), no HW logo
WSK-24/U – Wireless Occupancy Sensor Kit with logo

Dimensions in inches (millimeters)

M13668

Application: Conventional, Heat Pump, Fan Coil, and PTAC Systems
Color: Premier White®
Power Method: 24 Vac or Battery
Network Communications: None
Comments: Selectable programmable or non-programmable; Includes 3 speed fan control and configurable sensor input for indoor temperature, occupancy sensor, or changeover.

Material Number	Switch Positions (System)	Switch Positions (Fan)	Terminals Designations	Stages	Setting Temperature Range
TB7100A1000/U	HEAT-OFF-COOL-AUTO-EM.HEAT	AUTO-ON; Fan Coil: HI-MED-LO-AUTO; PTAC: HI-LO-AUTO	R, Rc, W1, O/B, Y, G, G2, G3, C, S1, S2	1 Heat/ 1Cool Conventional; Up to 2 Heat/ 1 Cool Heat Pump; 2 or 4 pipe Fan Coil; Up to 2 Heat/ 1 Cool PTAC	Heat: 40°F to 90°F; Cool: 50°F to 99°F (Heat: 4.5°C to 32°C; Cool: 10°C to 37°C)