



Hardware



Software



Services



Thermostats

TS-102 | TS-200 | TS-300

GridPoint thermostats provide two-way communication ability to enable precise management and control of climate and comfort settings from the web-based GridPoint Energy Manager dashboard, or in the case of the TS-200, directly from its convenient touchscreen. The thermostats also capture and store real-time and historical climate data to deliver the intelligence needed to inform energy optimization measures.

The universal connectivity of GridPoint's thermostats with virtually all current HVAC systems makes them suitable and cost-effective for either new or retrofit building control installations.

Feature Highlights

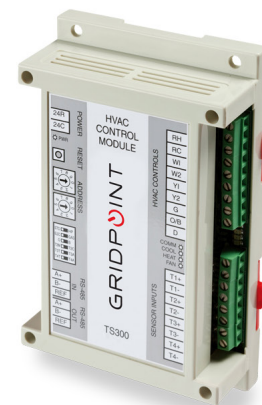
- Communicates bi-directionally with GridPoint EMS controllers (wireless options available)
- Configurable for gas, electric, or heat pump HVAC systems
- Controls up to two stages of cooling and three stages of heating
- Customizable touchscreen display interface (TS-200 only) allows you to:
 - Perform system-level monitoring and control
 - Override lighting group schedules
 - Change setpoints on other thermostats within the network
- Built-in, "fail-safe" mode automatically defaults to occupied temperature settings if data communications with the building control system are lost
- Thermistor (Remote Sensor or Zone Sensor Modules) and supply duct temperature probe inputs:
 - TS-102: 1 input
 - TS-200: 2 inputs
 - TS-300: 4 inputs
- Onboard data ports, including:
 - 2 wire RS485 serial data communications port
 - Wireless
- Remotely loadable, onboard control program
- Rugged design specifically for use with commercial and industrial building control systems



TS-102



TS-200



TS-300



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TS-102, 200, and 300 Thermostats - Features and Specifications

General	<ul style="list-style-type: none"> • Operating voltage: 24 VAC or 24 VDC ($\pm 20\%$) • Power: 3.6W [maximum, excluding power for Remote Sensor Modules (RSM)] • Operating temperature: 40 °F to 110 °F
HVAC system compatibility	<ul style="list-style-type: none"> • Works with all standard gas/electric and heat pump HVAC systems • Up to 2 stages cooling/3 stages heating • Auxiliary heat control
Communication interface	<ul style="list-style-type: none"> • Protocol option: <ul style="list-style-type: none"> - Modbus RTU - Optional wireless (TS-200 Only) • Hardware: <ul style="list-style-type: none"> - One, 2 wire RS485 for data communications with RSM devices (TS-102 Only) - One, 2 wire RS485 communications port
External indicators	<p>TS-200</p> <ul style="list-style-type: none"> • 2.0" H x 2.0" W LCD touch panel <p>TS-102 / TS-300</p> <ul style="list-style-type: none"> • Power - green • Communication - red • Heat mode - red (flashes for 1st stage, fixed on for 2nd stage) • Cool mode - red (flashes for 1st stage, fixed on for 2nd stage) • Fan - red
Setpoints	<ul style="list-style-type: none"> • Ranges: <ul style="list-style-type: none"> - Cool = 60°F to 95°F - Heat = 40°F to 85°F • Automatically goes into occupied settings (user definable) if communication with EMS controller is lost for a predefined time (user definable) • Stage differentials: <ul style="list-style-type: none"> - 1st stage = 0.5 °F to 3.0 °F programmable in 0.5 °F increments - 2nd stage = 0.5 °F to 3.0 °F programmable in 0.5 °F increments - 3rd stage (auxiliary heat) = 1 °F to 10 °F programmable in 1.0 °F increments • Heating/Cooling deadband setpoint = 1 °F to 5 °F
Temperature measurement	<ul style="list-style-type: none"> • Local - onboard • Remote - analog inputs
Protection	<ul style="list-style-type: none"> • Over-voltage and over-current protection on RS485 communication ports • Configurable minimum time for on/off compressor cycling • Power fuse - automatically resettable
HVAC connections	<ul style="list-style-type: none"> • Y1 - compressor stage 1 (relay rated 1 amp at 30 VDC) • Y2 - compressor stage 2 (relay rated 1 amp at 30 VDC) • W1 - heat stage 1 (relay rated 1 amp at 30 VDC) • W2 - heat stage 2 (relay rated 1 amp at 30 VDC) • G - fan (relay rated 1 amp at 30 VDC) • O - changeover valve (relay rated 1 amp at 30 VDC) • RH - 24 VAC hot (heat) • RC - 24 VAC hot (cool)
Switches/Jumpers <i>HVAC control (dip type)</i> <i>Communication (jumper header)</i> <i>Address</i>	<ul style="list-style-type: none"> • Position 1 - electric/fossil fuel • Position 2 - heat pump/standard (H/C) • Position 3 - reversing valve = O/B • Jumper 1 - RS485 port 1 terminating resistor (2 wire, TX/RX) • Jumper 2 - RS485 port 2 terminating resistor (2 wire, TX/RX) • Two rotary encoder switches - address <ul style="list-style-type: none"> - Each has 0 - 9 positions
Mechanical	<p>TS-102 & TS-200: 4.8" H x 4.4" W x 2.0" D TS-300: 5.4" H x 3.5" W x 1.5" D</p>