Vivint Smart Thermostat
(VS-ZGBTHERM-001)
Quick Reference (Overview, Installation, Specs, Regulatory)

△.vivint

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The Vivint Smart Thermostat is a state-of-the-art intelligent climate-control device that can be installed as a standalone thermostat, or added to an integrated Vivint Smart Home system, to simplify and enhance home comfort and automation. The thermostat lets the homeowner regulate temperature and humidity inside the home, as well as balance comfort and energy efficiency in order to optimize savings. The standalone solution connects the thermostat to the Vivint Smart Zigbee Bridge (paired to the local network), and is managed via the Vivint mobile app. The integrated solution adds the thermostat to the system with the bridge and uses the Vivint Smart Hub to manage the thermostat as a component of the larger Vivint Smart Home ecosystem.

The Vivint Smart Thermostat can be installed either DIY by the homeowner or professionally by a Vivint Smart Home Pro (FSP) technician. Once installed and powered on, the thermostat is added to the system and configured using the app and the thermostat's buttons. Additionally, you can specify and adjust the various settings — Heat, Cool, Fan, Humidity, Schedules — directly at the thermostat with the up/down and side buttons, or remotely via the app screens. Note: The Vivint Smart Thermostat is an indoor use only device.

Key features include — Compact elegant design that blends into the home environment; Optional wall-covering trim plate; Hidden OLED display that wakes on approach; Easy up/down and menu selection controls; Downcast LED light indicating current function and status; Strong and reliable Zigbee connection.

This document includes a product description, illustrations, installation instructions, basic operation / user functionality, as well as technical specifications, standards listings, and regulatory compliance references.

Installation Instructions Outline

This outline provides a summary of the installation procedure for a Vivint Smart Thermostat device, including wiring and attaching. After installing the thermostat, proceed to the next steps of adding the thermostat to the system (standalone with the bridge, or integrated with the hub), and configuring its settings. The installer, either the homeowner (DIY) or a Vivint technician (professional), should carefully read all of these steps to ensure a successful installation and optimal performance. For additional information, refer to the *Field Service Smart Home Pros* website, or the *Vivint Support* site.

IMPORTANT: For the standalone thermostat solution, setting up the required Vivint Smart Bridge is a separate procedure. For instructions, see the next page(xref here).
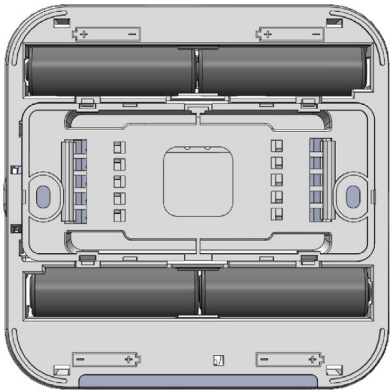
To install the thermostat, follow these steps:

1. **Test the existing HVAC system**. Test the heating and cooling functions to ensure that it is fully operational. If the HVAC system is not working properly do NOT install the new thermostat.
2. **Power down the HVAC system**. Go to the circuit breaker box and switch the HVAC breaker to OFF. NOTE: You should do this prior to working with any wires!
3. **Remove the existing thermostat from the back plate**. Return to the thermostat and remove the front piece from its back plate.
4. **Take a photo of the wiring**. Use your camera to take a photo of the current wiring pattern. You can use this photo to accurately reconnect the wires to the new back plate wire terminals.
5. **Disconnect and label the wires**. If you are using the app installation/setup screens, follow the prompts to check/select the wires. Disconnect the wires one by one and label them with the provided stickers.
6. **Remove the existing back plate**. Unscrew and remove the back plate from the wall. Be careful to not let the wires fall down inside the wall. Remove the existing trim plate if necessary.
7. **Reconnect the wires to the new back plate**. First, lift out the back plate piece from the back/inside of the thermostat unit. Remove the internal jumper wire. Then, pull all of the wires through the center hole of the back plate, and using the photo and sticker labels as a reference connect each wire to the appropriate terminal. NOTE: When inserting the wires, press down on the terminal connector and release when the wire is firmly in place.
8. **Install the new mounting / back plate**. Use two screws to install the new back plate on the wall. NOTE: You can also install the optional trim plate to cover blemishes on the wall. (Take another photo of the wiring to compare.)
9. **Power on and boot up the thermostat**. Remove the battery pull tabs to apply power from the 4 AA batteries to the thermostat. The Vivint Smart Thermostat will initiate the boot process.
10. **Attach the thermostat to the back plate**. Push the thermostat on to the back plate until it snaps securely into place. Proceed to the next steps of adding the thermostat to the system and configuring settings (see the next page/xref here).
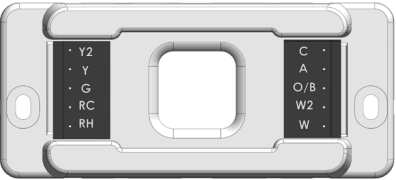
INSTALLATION TIPS / BEST PRACTICES:

- If the existing system is not functioning, do NOT install the new thermostat.
- Do NOT work with powered wires, NO EXCEPTIONS.
- Label all wires according to existing terminals.
- Don't let wires touch or slip into the walls.
- Make sure the back plate is level.
- Make sure wires are stripped properly, in good condition, and fully inserted.
- Always add the thermostat on battery power.

Thermostat (back / inside view) —

Mounting / Back Plate (front view) —

Thermostat (attaching to back plate w/ trim) —

Set up the Vivint Smart Bridge

In order to use the Vivint Smart Thermostat as a standalone device you must have a Vivint account and a Vivint Smart Zigbee Bridge installed and paired to the local network router. This section describes how to set up the bridge to which you can add(connect?) the thermostat.

To set up and pair the bridge to the local network/system:

1. Create a Vivint account. [editing note: need details/info here…]
2. Download the Vivint app to your mobile device.
3. Open the app and log in to your account.
4. At the security screen tap the menu icon in the upper left corner > tap **Set Up a Device** > **Zigbee Devices** > and then tap **Zigbee Bridge**.
5. Physically connect the bridge to the local network router, using an Ethernet cable.
6. Power on by plugging the power supply into a wall outlet and connecting it to the bridge (USB-C).
7. Press the **Pair** button on the bottom of the bridge.
8. In the app, tap the **Pair Bridge** button. This may take a few minutes.
9. Once the bridge is successfully paired, you can use it to connect other Zigbee devices, such as the Vivint Smart Thermostat, and control them via the app.

Add the Thermostat to the System

Now that the thermostat is installed (and the bridge set up), the next steps are to add the thermostat to the system and configure its settings. These tasks are done at the thermostat, with the up/down and side buttons, and via the Vivint app which guides the DIY installer through each step of the process. This section provides a high-level outline and points to the onscreen prompts in the app for more detailed instructions.
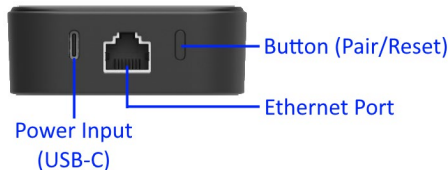
To add and configure the thermostat, follow these steps:

1. **Add the thermostat to the system**. With the thermostat powered on and booted up, press the side button to pair it to the bridge. Next, in the app tap **Zigbee Devices** > **Zigbee Thermostat** > and then tap **Pair Thermostat**. The app searches for the thermostat. Once successfully found the thermostat appears in the list of devices. Name the device.
2. **Configure the thermostat for the HVAC system**. At the thermostat, use the side button to scroll through and select options, including: **Heating Type** (*Forced Air, Heat Pump, Radiant, None*); **Fuel** (*Natural Gas, Propane, Fuel Oil, Electric; Geothermal*); **Heating Stages** (); **Cooling Type** (*Air Conditioning, Heat Pump, Evaporative*); *Cooling Stages* (1, 2).
3. **Customize thermostat settings**. In the app, specify temperature and other settings such as: Heat, Cool, Fan, Humidity, and Schedules ().
4. **Power up the HVAC system**. Go to the breaker box and switch the HVAC breaker to ON.
5. **Test the thermostat**. Turn on the A/C and feel for cool air. Do the same for heat.
6. **Set the schedule**. Confirm the time zone, and customize weekday and weekend schedules for: Wake. Leave. Arrive. Sleep. For more information, visit the *Vivint Support* site.
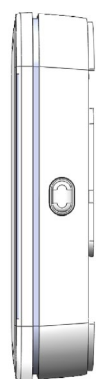
Smart Bridge (front view) —

LED Light

Smart Bridge (bottom view) —

Button (Pair/Reset)

Ethernet Port

Power Input (USB-C)

Thermostat control / sample app UI screen —

Operation Overview / User Functionality

Once the thermostat is up and running, the user can perform the following functions at the thermostat (with the up/down and side buttons) and via the app or at the hub. For detailed instructions, refer go to the online Help resources (articles and video tutorials) at the *Vivint Support* site.

- Adjust heating and cooling temperature levels
- Adjust the humidity level
- Set and modify a schedule
- And more! Add more user features here…

Additionally, in the app (or hub) **Devices > Thermostat** settings page, you can perform these management and configuration tasks:

- Rename the thermostat device
- Reboot the thermostat
- Factory reset the thermostat
- Delete the thermostat
- More?

Thermostat (side view) —

Thermostat (front view) —

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Thermostat (bottom view) —

Troubleshooting Tips

(For a complete list of potential issues and additional troubleshooting details, refer to the *Field Service Smart Home Pros* website, or the *Vivint Support* site.)

If the thermostat is experiencing these types of issues, check the possible causes and take the necessary action to resolve:

✓ **Power Issues:**
- Batteries are low or installed incorrectly — replace the batteries.
- Confirm the wires are properly inserted and in good condition.
- HVAC system is not powered on — check the breakers.

✓ **Programming Issues:**
- Thermostat is not configured properly for the HVAC system.

✓ **HVAC System Failure:**
- HVAC system is not powered on.
- HVAC is underperforming, not blowing as hard or cold as usual. The filter may need to be replaced. Perform regular system maintenance.
- HVAC hardware failure.

✓ **Signal Interference:**
- Other devices could potentially cause interference. Power down the device you suspect to be causing interference. Re-attempt using the thermostat. If it functions normally, you know that device is the issue. If possible, keep devices causing interference completely powered off. Occasionally these devices will have the option to change the channel.

✓ **Connectivity Problems:**
- Ensure the thermostat is properly paired.
- Thermostat is too far away from bridge or hub.
- Hardware issue with the bridge, hub, or thermostat.
- Thermostat offline — remove from the system and re-add on battery power.

Technical / Hardware Specifications

Vivint Part Number (P/N)	VS-ZGBTHERM-001
Model Number (M/N)	TH03
Color	White
Weight	10.1 oz. (approximate)
Dimensions (H x W X D)	4.5 in x 4.5 in x .8 in / 115 mm x 115 mm x 20 mm
Power	Four AA batteries (1-2 year battery life approx.) or 24V AC with C wire from HVAC system
Connectivity / Range	Zigbee / 300 ft. approximate; open air
Sensors	Temperature, humidity, proximity, ambient light
Supported Fuels	Natural gas, propane, electric, fuel oil, geothermal
Compatibility	Conventional forced air, radian, heat pump; Up to 3 stages of heating and 2 stages of cooling
LED (Downcast Light)	Orange (solid): Thermostat in heating mode Orange (pulse): HVAC system actively heating Blue (pulse): Thermostat in cooling mode Blue (pulse): HVAC system actively cooling
Wire Terminals	A — 2nd sate Aux heat, Hum, Dehum, 3 stage conv. C — 24v Common G — Fan O/B — Heat Pump Reversing Valve RC — Relay Power Cool RH — Relay Power Heat W — Heat W2 — 2nd Stage Heat/AUX Heat Y — Cool Y2 — 2nd Stage Cool
Operating Temperature	0°C to 49°C (32°F to 120°F)
Relative Humidity	15% to 100% non-condensing
Weatherproofing	IP65, with UV protection

Standards Certifications and Listings

FCC	47 CFR Part 2.1091; 47 CFR 1.1307; 47 CFR 1.1310 47 CFR Part 15 Subpart B, Class B; 47 CFR Part 15 Subpart C
Industry Certification	*Zigbee Certified Product*
FCC ID:	2AAAS-TH03

*For complete regulatory compliance information, go to: vivint.com/legal/fcc

⚠ Warning: California Proposition 65

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to: https://www.P65Warnings.ca.gov

FCC Regulatory Compliance Declaration*

CAUTION! **Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

FCC (U.S.) Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm (7.9 in) between the radiator and your body.