A person is sitting on a couch, using a silver laptop. The laptop screen displays the Ameren website, which includes a navigation bar, a search bar, and several green and blue buttons. The person's hands are visible on the keyboard, and they are wearing a blue long-sleeved shirt. A white text box is overlaid on the center of the image, containing the title of the program.

Ameren Illinois
Residential Energy Efficiency Program
Smart Thermostat Offering
July 2020

AmerenIllinoisSavings.com/COVID-19

AmerenIllinois.com/Recovery

- Resources on appropriate PPE
- Links to webinars with information on COVID-19
- Apply for Financial Assistance
- Explore Payment Options

For more information on financial assistance, contact Ameren Illinois at [1.800.755.5000](tel:18007555000).

What is a Smart Thermostat?

- A smart thermostat is a Wi-Fi enabled device that automatically adjusts heating and cooling temperature settings in a home for optimal performance
- ENERGY STAR[®] labeled smart thermostats have been independently certified, based upon actual field data, to deliver energy savings

Types of Thermostats

- **Manual Thermostats** control heating and air conditioning by allowing one to manually adjust the temperature in the home
- **Programmable Thermostats** enable the user to schedule a program to control the home's temperature based on time of day and/or day of the week
- **Smart Thermostats** are both internet-enabled and learning capable. What makes them "smart" is their ability to adapt to a customer's preferences and adjust a home's temperature based on occupancy; internet connectivity allows user to control their smart thermostat from anywhere using a digital device

Save Energy with Simplified Programming



- Easy to program, thanks to their user-friendly screens and mobile apps
- Energy-saving settings that allow your thermostat to manage your home's climate and help customers save on energy costs

- Some models notify you of energy-saving behaviors and provide tips in easy-to-read monthly energy reports to help you achieve even more energy savings
- Easily check the mobile app from anywhere to see if the air conditioning or heat is running and at what temperature
- Make thermostat adjustments from anywhere

Eliminate Errors

- Adapts to the user's schedule and preferences
- Allow the smart thermostat to handle lowering and raising the temperature while they come and go makes it easy to be energy-efficient
- Some smart thermostat models can even detect occupancy and adjust the temperature so they don't have to worry about leaving the air conditioner or furnace running on high while you are away

Customers with a residential account can receive **one** incentivized smart thermostat as long as it:

- a) Controls the primary heating appliance for the residence
- b) The primary heating appliance is operated by an Ameren Illinois supplied fuel
- c) ENERGY STAR certified

Program Incentives for Smart Thermostats

Ameren Illinois has five ways that residential customers can be incentivized to enjoy the benefits of a smart thermostat:

- 1) Ameren Illinois Residential Online Marketplace
- 2) Instant Rebate Portal
- 3) Online Rebate Form
- 4) Program Ally Installation
- 5) Smart Savers Initiative





Online Marketplace

- Residential customers can purchase smart thermostats through our Online Marketplace
- Available products and discounts vary so check for current offers

AmerenIllinoisSavings.com/Marketplace

- Customers can sign up to receive a \$100 rebate coupon and redeem it with participating retailers during checkout to instantly save on select ENERGY STAR certified smart thermostats

AmerenIllinoisSavings.com/Smart

Online Rebate Form

- Customers may purchase any ENERGY STAR certified smart thermostat at the retailer of their choice and us the completed rebate form with purchase receipt to receive a rebate check in 4-6 weeks
- This can also be handled by utilizing our online rebate form

AmerenIllinoisSavings.com/Rebates



Program Ally Installation

- Smart Thermostats are available to customers through you when you complete a qualifying project through our Heating & Cooling Initiative
- You can find the Incentive Application on the Program Ally Portal

AmerenIllinoisSavings.com





Smart Savers Initiative

- Qualifying customers are eligible to receive a **FREE** smart thermostat from the Ameren Illinois Smart Savers Initiative
- Eligibility is based on targeted zip codes



[AmerenIllinoisSmartSavers.com](https://www.AmerenIllinoisSmartSavers.com)



Which Smart Thermostats Qualify

- Only ENERGY STAR certified smart thermostats are eligible for incentives, discounts, and rebates from our Program
- Send customers to website to find a link to the ENERGY STAR product finder website that contains 62 eligible products

AmerenIllinoisSavings.com/Smart



Time of Day Usage

- Uses load monitoring techniques to determine the appliances that are turned ON within a given period of time in a household or workplace
- Can help occupants optimize their power consumption behavior
- Most of them estimate the currently turned on HVAC appliances only using electrical measurements such as current and/or voltage, active power, and reactive power



- Geofencing allows for a HVAC system prepare for your arrival home
- A geofence is a virtual perimeter for a geographic area
- Once you've set your geofence radius, your smartphone determines if you've crossed from one side of your geofence boundary to the other
- The geofence “crossing” happens at a predictable spot on your commute or while you're out and about

Occupancy Sensors

- An on-unit sensor that allows the smart thermostat to activate heating and cooling cycles based upon the presence of occupants in the area (commonly a room) covered by the sensor
- This transcends a programmable thermostat's capabilities to be set based on assumed usage patterns which can be variable much of the time

Outside Temperature Detection

- Smart thermostats understand how the residence heats up and cools down (based upon learned system performance) and can use the Wi-Fi connection to track local weather throughout the day
- It can then use this information to determine the best way to bring the residence to the desired indoor temperature when the customer arrives home and maintain it while minimizing how long that the heating and cooling equipment runs for



Humidity Measurement

- This function allows the smart thermostat to regulate indoor humidity through the HVAC system to help prevent frost buildup on windows when it is cold outside and high humidity indoors or lower indoor humidity in the summer in the absence of a dehumidifier



Additional Temperature Sensors

- These sensors work in conjunction with the smart thermostat to deliver preferred temperature in the rooms that matter to the customer, not only the room where the thermostat is installed
- They can be used to receive room specific temperatures when used with mobile apps

Additional Occupancy Sensors

- As with the additional temperature sensors, these remotely installed sensors also help to deliver better comfort to the rooms that matter to the customer based upon the time spent in them

Many Other Features to Explore

- Many will monitor equipment performance and send an alert if anything is not working or is working sub-optimally
- Multi-stage equipment compatible
- They can recognize the temperature difference on cool evenings and will use outside air to cool down the home instead of the air conditioner if used with a ventilator
- The ability to sense the ambient light is the area
- Built in rechargeable lithium-ion battery

Many Conveniences

- Can be controlled and monitored via mobile device apps
- Can control multiple devices and homes from one account
- The ability to spot an occupant from across the room and illuminate to show time, temperature, or weather
- Send service reminders to help with the maintenance of the HVAC system
- Display local weather forecasts

An In-Depth Look



ENERGY STAR certified smart thermostats are required to:

- Work as a basic thermostat in absence of connectivity to the service provider
- Give residents some form of feedback about the energy consequences of their settings
- Provide information about HVAC energy use, such as monthly run time
- Provide the ability to set a schedule
- Provide the ability to work with utility programs to prevent brownouts and blackouts, while preserving consumers' ability to override those grid requests

Accuracy & Standby Features

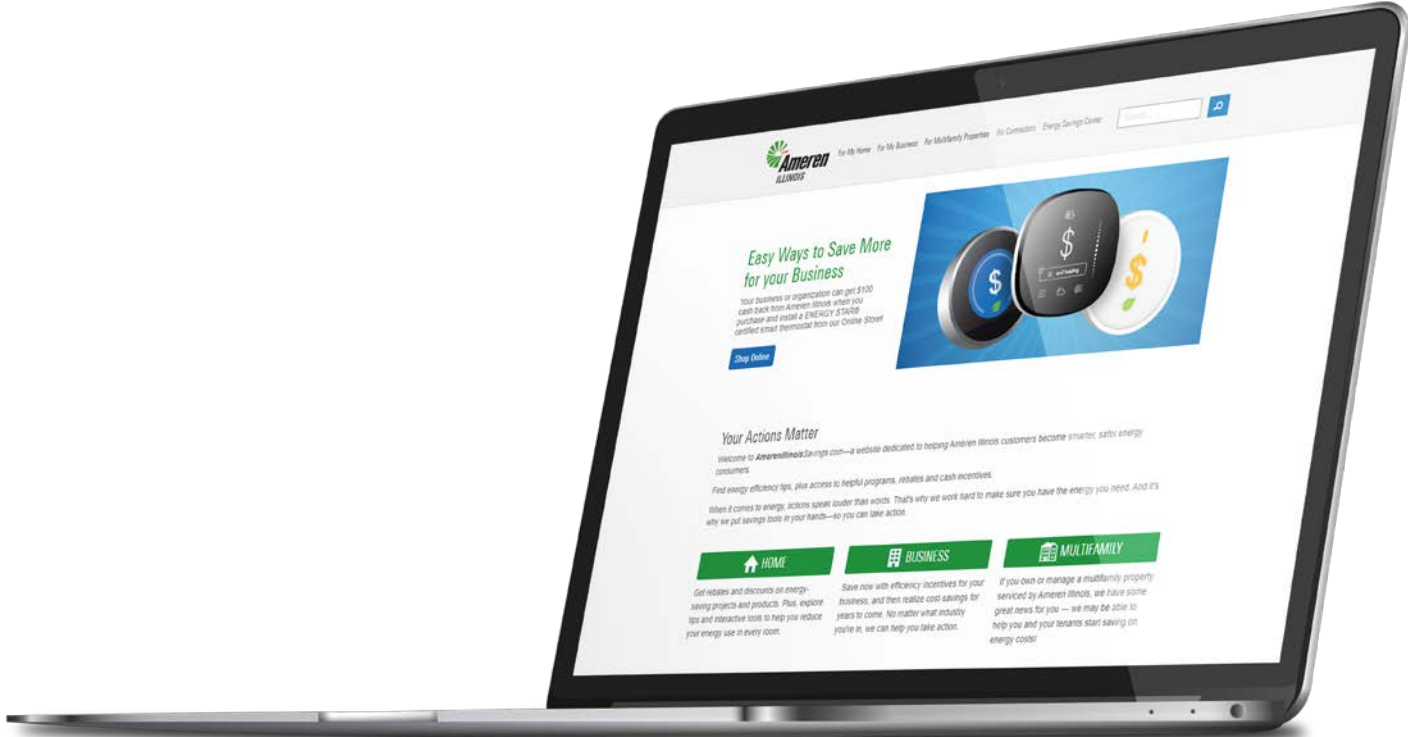
- Must meet a Static Temperature Accuracy of $\leq \pm 2.0$ °F
- The average standby power consumption must be ≤ 3.0 Watts
- The “Time to Enter Standby Mode” after a user’s interaction must be ≤ 5.0 minutes

Energy Savings Criteria

- Certified smart thermostats are required to meet the energy savings criteria for reduction in cooling and heating system runtime, and report electric resistance heat use for heat pumps
- In order to demonstrate compliance with these energy saving criteria, smart thermostat service providers use EPA-provided software to analyze and combine a year of data from hundreds of their customers' homes, reflecting how the thermostats were actually used, to calculate national savings metrics for heating and for cooling

For more technical information such as compatibility with the various brands of HVAC appliances, please check with your equipment manufacturer and the specifics for each thermostat





- A multifamily property (not individual tenants) can be referred to us to receive smart thermostats through the Smart Savers Initiative
- Visit website for additional incentives

AmerenIllinoisSavings.com/Multifamily





Business Program



- Non-residential customers can receive a free smart thermostat through the online business store at AmerenIllinoisSavings.com/OnlineStore
- There is a limit of **two** free smart thermostats per **non-residential** Ameren Illinois electric account
- Code: SMART2020
- Visit AmerenIllinoisSavings.com/Business



Business Program Incentives



Lighting



Leak Survey & Repair



Custom*



Heating & Cooling (HVAC)



Steam Traps



Retro Commissioning*



Variable Frequency Drives



Specialty Equipment



New Construction*

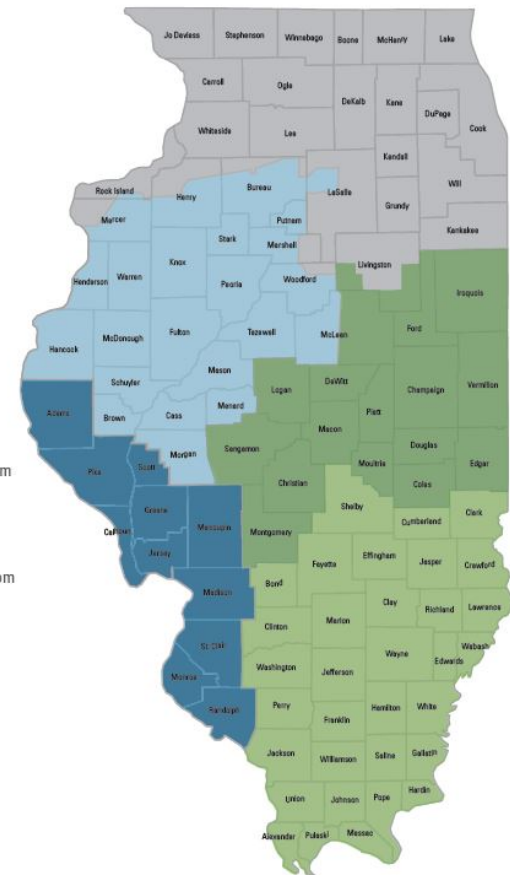
* Requires Pre-Approval

For Additional Information



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