

THE PERFECT TEMPERATURE

A look at some of the smarter-than-ever thermostats that are saving consumers energy and money

By Sharon Jayson

With summer heat in full sweat mode, keeping cool counts for a lot in Central Texas. That's why this installment of Bluebonnet Electric Cooperative's Smart Home series is zeroing in on your thermostat.

The basic digital thermostat that you adjust manually is still available and offers the least expensive method to control your home's temperatures, at \$30-\$60. Programmable thermostats, which have been available for decades, allow customers to set different temperatures for various times of day so that an empty house can be warmer and potentially save money for owners. Programmable thermostats cost approximately \$60-\$150.

Smart thermostats that connect to the internet are the newest option, with a dizzying array of features only available because of internet connectivity and smartphone capabilities.



SMART LIVING

Part of a series about the latest advances in home technology and 'smart' living options.

Costs can range from just over \$100 to several hundred dollars, according to those in the heating, ventilation and air conditioning industry, known as HVAC.

The Nest Learning Thermostat was the first to debut in 2011, but the competition has grown quickly.

"There's probably 15-20 smart thermostats. You can spend anywhere from \$140-\$700 or \$800 on one thermostat," said John Osgood, co-owner of Service Wizard, a heating and air conditioning company serving the Austin metropolitan area.

Osgood says air conditioning manufacturers also have specialty thermostats made for their specific units that are included with purchase of the AC.

"Our connected or smart thermostat sales are doubling year over year and driving most of our growth within what we call our 'comfort business,' which is thermostats," said Scott Harkins, a vice president at Honeywell Connected Home in Louisville, Ky.

The website bestreviews.com most recently

offered its take on thermostats in July, naming the 3rd Generation Nest Learning Thermostat, the "Best of the Best" and rating as good picks the Honeywell Wi-Fi Smart Thermostat, Venstar WiFi ColorTouch High Resolution Thermostat and ecobee3 Smarter Wi-Fi Thermostat with Remote Sensor, 2nd Generation. The site selected ecobee's device as "Best Bang for your Buck." And the site warns "not all thermostats (even smart ones) work with all heating and air conditioning systems. Make sure that you choose a product that's guaranteed to work with your home's existing equipment."

In its Nest analysis, the website said, "Even though it is priced higher than the other products on our list, we feel it represents the state of the art and is without question the best smart thermostat available right now."

However, Nest has also been criticized for not working as promised. Early versions of the thermostat used motion detection to determine whether residents were home or away and locating the Nest thermostat in a hidden spot also affected its performance.

But now, the system uses geo-fencing, which is a GPS-based system that can include up to 10 different smartphones and determine when any of them is close to home in order to alter the temperature, said Brad Davids, of Boulder, Colo., business development manager for Nest Labs.

"The product has gotten better and better over time and saves more energy for consumers than it did a year ago," he said.

All Nest customers benefit, Davids said. "Even people who bought Nest in 2011 have been receiving free updates over the years. There have been more than 50 software updates since the product first came out," he said.

Bluebonnet's website offers an Energy Tool to help co-op members track energy use, costs and environmental impact during a particular billing period. And the website offers tips on how members can cut costs, improve efficiency and reduce their impact on the environment.

Despite efforts to keep energy costs down with smart thermostats, the thermostat doesn't tell the whole story, says Donald Prather, technical services manager at ACCA, a nonprofit trade association for indoor environment and energy service contractors, based in Shirlington, Va.

"An HVAC system needs to be designed, installed and maintained properly. That's where you get your bang for your buck. If you keep it maintained, that will save you more in the life of the equipment than a thermostat upgrade," he said.

There's no mystery in keeping energy costs low, says Osgood, of Austin's Service Wizard.

"If you want to see somebody who has a low energy bill, it's because they keep the thermostat set higher while they're there and while they're gone," he said. "The best way to save money is to turn it up and keep it working properly and not keep it as cool." ■

Honeywell Wi-Fi Smart Thermostat

Voice controllable via Amazon Prime's Alexa, this device includes a customizable display to match existing decor. Password options provide added security. Allows remote access via smart device or computer. Price: \$199; honeywell.com



Venstar Wi-Fi ColorTouch High Resolution Thermostat

The Venstar includes a touchscreen and Wi-Fi connectivity via smart devices. Includes an optional outdoor sensor. Price: \$225; venstar.com



Illustration from istockphoto images; thermostat photos and descriptions from company websites and amazon.com

Nest Learning Thermostat

The Nest Learning Thermostat, now in its third generation, learns the user's habits and programs itself. It can connect to a voice controller like Amazon Prime's Alexa. Auto Away adjusts the temperature after you leave. Price: \$249; nest.com



ecobee3 Smarter Wi-Fi Thermostat with Remote Sensor, 2nd Generation

A thermostat touted as paying for itself in as little as a year, the ecobee allows Wi-Fi control from a computer, smartphone or tablet. Based on an owner's answers to four questions, the device makes money-saving changes in temperature control. Price: \$249; ecobee.com