

## PEES Power Systems

# Smart thermostats inadvertently strain grids



Voltage range:691.2-947.2V

>6000 cycles(100%DOD)

Rated battery capacity:  
216KWH (customizable)

EMS communication:  
4G/CAN/RS485



## Overview

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As states and local communities push to electrify heating systems in buildings, the use of smart thermostats could inadvertently strain power grids in the morning before solar energy is available, researchers at Cornell University found in a newly published study. Set by default to turn on before dawn, the smart thermostats unintentionally work in concert with other thermostats throughout neighbourhoods and regions to. A Nest smart thermostat shows how long it will take to heat up a home. — Smart thermostat users probably love the savings they see in their monthly energy bills, but a new study finds many people may be falling into a “trap” that's actually straining their local power grid. Researchers from Cornell University say letting the thermostat make all of the.

## Smart thermostats inadvertently strain grids

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### Smart thermostats inadvertently strain electric power grids

As more consumers adopt devices that shift their #energy usage, the risk of default settings causing load synchronization (e.g. all thermostats turn heating on at 6am in the winter) grows.

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### Smart thermostats could complicate transition from fossil fuels, study

As states and local communities push to electrify heating systems in buildings, the use of smart thermostats could inadvertently strain power grids in the morning before solar energy is available,

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### Smart Thermostats Inadvertently Strain Electric Power Grids

If hundreds of homes have their smart thermostat set to turn on at 6 a.m., the electric grids see a peak at 6:05 a.m., which is about an hour before daylight during New York state winters.

## Smart thermostats could actually be damaging local power grids

ITHACA, N.Y. -- Smart thermostat users probably love the savings they see in their monthly energy bills, but a new study finds many people may be falling into a "trap" that's actually ...



## Smart thermostats inadvertently strain electric power grids

Set by default to turn on before dawn, smart thermostats unintentionally work in concert with other thermostats throughout neighborhoods and regions to prompt inadvertent, widespread ...

## Smart thermostats inadvertently strain electric power grids

People were doing setbacks and other programming on "dumb" thermostats long before internet-enabled stats were a thing. Utilities will latch onto anything to deflect blame for their poor demand ...



## Smart thermostats strain

## electricity grids

Smart thermostats may inadvertently be putting extra strain on electricity grids, according to researchers at New York's Cornell University.



### Smart thermostats inadvertently strain electric power grids

Smart thermostats may be falling into a dumb trap. While these devices save homeowners money, Cornell engineers found they may be prompting unintentional energy spikes on the grid.

- LiFePO<sub>4</sub> Battery, safety*
- Wide temperature: -20~55°C*
- Modular design, easy to expand*
- The heating function is optional*
- Intelligent BMS*
- Cycle Life:> 6000*
- Warranty:10 years*



### Smart thermostats inadvertently strain electric power grids , Hacker ...

I'm saying that even if the power were there, these smart thermostats would still strain the grid by turning on all at exactly the same time. Power coming from renewables can exacerbate the problem, thus ...

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