

# Proven Technology That Reduces Nuisance Alarms

According to the National Fire Protection Association (NFPA), there were almost 2.5 million false alarms in 2014. By 2018, that number climbed to 2.9 million. One of the biggest contributors? Microwave ovens. Especially in facilities like senior's homes, commercial office buildings and college & university residences. Not surprisingly, many of these facilities are looking for ways to prevent these costly and potentially dangerous nuisance alarms from occurring. Products like Safe-T Sensor™ and SmartMicro™ have been designed for use on microwave ovens and can significantly reduce false, or nuisance alarms. That saves property managers money from their operating budgets, reduces disruption to residents, and keep firefighters free to respond to real emergencies.



Take Oklahoma State University as one example.

In 2016, the local fire department notified the University that it was concerned about the number of nuisance fire alarms on campus. Cooking was determined to be the most frequent cause, and while Oklahoma State was not being charged for the alarms, the fire department made it clear that would change if the numbers didn't go down.

Nuisance alarms can be very expensive. When all costs are factored in – including

the deployment of firefighters and equipment as well as the University's own response by campus police, maintenance personnel, etc. – the University could have been on the hook for as much as \$2,000 for each call.

In looking for a solution, Oklahoma State discovered Pioneering Technology's Safe-T Sensor, a device designed to interrupt power to the microwave at the first sign of smoke.

The product is very easy to install: The sensor's control box plugs into the wall, the

microwave plugs into the control box, and the device's 'sensor' is attached to the microwave near the exhaust vent. When smoke escapes from the microwave's exhaust vent it passes over the sensor, which then activates and interrupts power to the microwave. No breakers, fuses or time delays are activated. The microwave is immediately ready for use again and another nuisance alarm is avoided.

Oklahoma State purchased 30 of the devices in 2016 as a trial and installed them on the common-area microwaves in

three residence halls that had the most nuisance calls.

Shannon Baughman, Associate Director of Operations in the Department of Housing and Residential Life, reports that positive results were immediate. Before the units were installed, there were 31 fire alarms for cooking in the three buildings. After their installation, there were only 16 – and these were likely from microwaves owned by students and not equipped with the Safe-T Sensor.

**If we assume fire nuisance calls cost \$2,000 each, that's a potential cost savings of \$30,000 for 2016 alone. Over the next four years, the savings would have amounted to \$120,000.**

Due to the favorable response from the test, the University made the decision to purchase Safe-T Sensors for all common-area microwaves throughout its 31 residence halls.

Baughman says her department worked hand-in-hand with the local Stillwater Fire Department, OSU Facilities Management, and OSU Health and Safety (including the University's Fire Marshall) on the sensor project. "They have responded VERY favourably to these devices, and fully supported our purchase and implementation," she says. "They were also very pleased at the results that we received from our trial."



The University has taken other actions to reduce nuisance calls, including resetting some of its fire panels and systems and changing the priority of some calls. In addition, the University has developed a series of fires safety posters and videos for student education.

As a result of these measures, the number of cooking fire alarms from all sources has decreased each year, from a high of 92 in 2016 to 22 in 2019.

Baughman says the Safe-T Sensor technology has not only been an instrumental in reducing the number of nuisance fire alarms on campus but has provided secondary benefits as well.



**"Our residents were also becoming de-sensitized to the fire alarms because they were happening so frequently," she says. "Fewer alarms translates to fewer interruptions to our residents' daily lives and creates a safer on-campus living environment."**

"Reducing the number of nuisance alarms also allows the Stillwater Fire Department to respond to more urgent issues and reduce their overall expenses."

To learn more about proven solutions that help prevent cooking fires, including **SmartMicro™**, the latest product innovation for microwave ovens, please visit [pioneeringtech.com](http://pioneeringtech.com).

**"OSU Housing and Residential Life's primary goal is the safety of our residents, and we take that responsibility very seriously. The implementation of the Safe-T Sensors has allowed us to meet that goal, and we have been very pleased with their performance and our return on investment." Shannon Baughman, Associate Director of Operations in the Department of Housing and Residential Life**