

Ionization smoke detection vs. Photoelectric type smoke detection - what is the difference?

There are generally two types of smoke detection devices- ionization smoke detection devices and photoelectric type smoke detection devices. Smoke particles of a varying number and size are produced in all fires. Ionization technology smoke detection devices are generally more sensitive than photoelectric technology smoke detection devices at sensing small particles, which tend to be produced in greater amounts by hot, flaming fires that are consuming combustible materials rapidly and may spread quickly. Sources of these fires may include paper burning in a wastebasket, or a grease fire in the kitchen. Photoelectric smoke detection technology is generally more sensitive than ionization smoke detection technology at sensing large smoke particles, which tend to be produced in greater amounts by smoldering fires, which may smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding.