

Another type of detector is an photoelectric smoke alarm. Here's how it works:

Inside the smoke alarm, there is an LED light that sends a beam of light (similar to a laser pointer) in a straight line across the chamber. In a separate compartment inside the chamber, there is a photosensor that detects light.

As smoke enters the detector, the smoke particles interrupt the light beam, scattering it in many directions. Some of the LED light scatters toward the light sensor. When light beams hit the sensor, the alarm will go off!

When the batteries in your smoke alarm get low, the smoke alarm automatically activates a low battery chirping sound different from the alarm sound so you know it's time to get new batteries.

Some smoke alarm contain both optical and ionization smoke detection systems.