



GAMMA RAYS

1 PM  
WAVELENGTH



X RAYS

10 PM- 1 NM  
WAVELENGTH



ULTRAVIOLET

10-100 NM  
WAVELENGTH



VISIBLE LIGHT

1 μM  
WAVELENGTH



INFRARED

1 μM-100 μM  
WAVELENGTH



RADIO WAVES

1 CM-1 KM  
WAVELENGTH



# HOW THERMAL IMAGING WORKS: A Closer Look

Thermal imaging is one of the most powerful technologies ever developed to enhance human vision. With the FLIR ONE™, a thermal camera allows us to see things the naked eye could never perceive on its own. But how?

Normally, human vision is limited to a very narrow, “visible” band of the entire electromagnetic spectrum. The infrared spectrum, also called thermal energy, has a longer wavelength than visible light. It is so long, in fact, that human eyes cannot see it, just like we can’t see microwaves.

With thermal imaging, the portion of the spectrum we perceive is dramatically expanded, helping us “see” heat even in the absence of light.



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TO SEE ALL AVAILABLE ASSETS, VISIT [FLIRONE.COM/PRESS](http://FLIRONE.COM/PRESS)



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HOW IT TI WORKS

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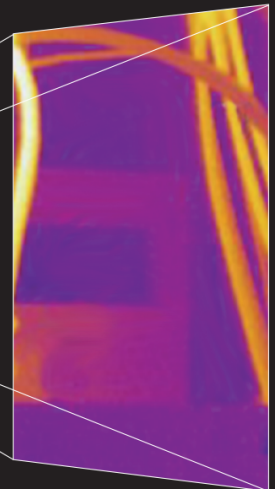
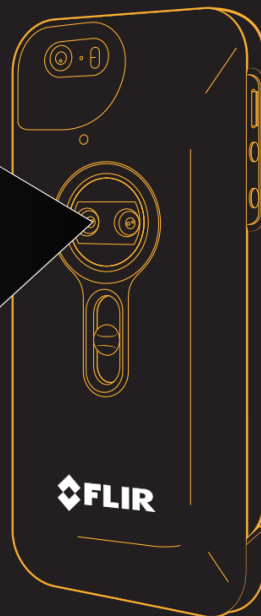
Using special sensor technology that was originally developed for military night vision, FLIR ONE converts heat, which is emitted from every object on earth, into color images. These color images allow users to not only see in the dark, but to also observe differences in temperature of fractions of a degree.

FLIR ONE's powerful capacity to augment human vision opens up a new world of possibilities for consumers. In addition to seeing in the dark and detecting invisible heat sources, the device helps users see through smoke.

While thermal imaging opens a whole new world of uses and opportunities to consumers, it is not the same as "X-ray vision." FLIR ONE cannot see "through" walls, doors, glass, or clothing; detect buried objects; or accurately gauge the surface temperature of shiny materials, which reflect their surroundings rather than generate their own heat signature.



Infrared  
spectrum



**FLIR ONE**



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FLIR ONE LAUNCH RELEASE

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