



**High resolution image at 300 dpi
(dots per inch), suitable for
book printing.**

Resolution is the capability of the sensor to observe or measure the smallest object clearly with distinct boundaries. There is a difference between the resolution and a pixel. A pixel is actually a unit of the digital image. Resolution depends upon the size of the pixel. Usually, with any given lens setting, the smaller the size of the pixel, the higher the resolution will be and the clearer the object in the image will be. Images having smaller pixel sizes might consist of more pixels. The number of pixels correlates to the amount of information within the image.

The term resolution is often used for a pixel count in digital imaging, even though British, American, Japanese, and international standards specify that it should not be so used, at least in the digital camera field. Image resolution can be measured in various ways. Resolution quantifies how close lines can be to each other and still be visibly resolved. Resolution units can be tied to physical sizes (e.g. lines per mm, lines per inch), to the overall size of a picture (lines per picture height, also known simply as lines, TV lines, or TVL), or to angular subtense.