



Understanding Image Resolution

Think of a digital image as a mosaic of millions of tiny squares. Each square contains a colour and is called a **pixel**. These pixels come together to form a digital image.

The number of pixels defines the size and quality of a digital image.

The higher the number of pixels in the image, the more detail the image contains. This is referred to as **image resolution** and is measured in pixels per inch (**ppi**).

An image has:

- the dimensions in pixels for the width and height of the image
- the total number of pixels in the image

E.g a digital image with the dimension 2592 W × 1936 H in pixels has the total number of 14.4 megapixels.

The number of pixels per inch determines if the image is **low or high resolution**.

How to choose image resolution

The intended use for the image will help you decide on the resolution you need to choose. You can select the resolution on your camera. You also have the option to change it after the image has been taken using Adobe Photoshop.

The standard resolution for images on screen is **72 ppi**. The standard resolution for good quality printed images is **300 ppi**.

How to change image resolution

- Open your image in Adobe Photoshop. Click on **Image** (in the top menu). Choose **Image Size**.
- Uncheck the **resample image** checkbox to avoid changing the number of pixels in the image.
- Enter the pixels per inch (ppi) number you want according to your intended use. The image dimensions will automatically resize.
- Click **OK** when you are happy with the changes.
- To save the image, click on **File** (in the top menu). Choose **Save As**.
- Name the file and click **Save**.

Now you have a new version of the same image at a different resolution.