

## Digital Datasheet

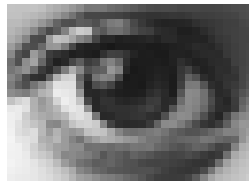
# About Resolution and Image Size

To produce high-quality digital images, it is important to understand how the data of images is measured and displayed. It might be incorrect to compare the human eye with a scanner or digital camera, but all operate by sampling the continuous tonality and color of reality. Whether sampled by a row of sensors on a moving bar (scanner), with a stationary array of sensors (digital camera) or viewed as a file on a monitor, the image or object is converted to a collection of discrete areas called "picture elements" or "pixels."

Information to help you get the most from digital imaging

**Image resolution:** PPI is the number of pixels displayed per unit of length in an image, usually measured in "pixels per inch" or "pixels per centimeter" printed over.

These following examples, from a portion of each resulting print, illustrate the inability of low pixel counts to render detail, while demonstrating the equally important factor of diminishing improvement at higher counts. For most digital prints there is a great visual difference between 25 and 100 pixels per inch images, and much less apparent difference between 200 and 300.



25ppi



50ppi



100ppi



200ppi



300ppi

While higher pixel counts can be utilized by most digital imaging equipment, files with too much resolution can be cumbersome to process and transport.

**Be sure to:** Ask for final size ppi specifications from your service provider when preparing your files in order to optimize your output.



A service of the  
Digital Printing  
& Imaging  
Association

The Digital Printing & Imaging Association (DPI) is the international trade organization comprised of firms that produce large format graphics using digital output technology. DPI's mission is to promote the efficient and effective use of digital imaging through education.