

Calculating the Pixel Resolution of Your Scanned Analogue Air Photos



TUTORIAL

You can calculate the Pixel Resolution of your scanned analogue air photos using a simple calculation.

$$\text{pixel resolution} = \frac{\text{photo scale}}{\text{scan resolution}}$$

Note: only the denominator is needed for photo scale

Required information:

- Resolution used when scanning the photos (in dpi – dots per inch)
- Photo Scale

Example:

Photo scale = 1:4000

Scan resolution = 200 dpi

$$\text{pixel resolution} = \frac{4000}{200}$$

$$\text{pixel resolution} = 20 \text{ inches}$$

$$\text{pixel resolution} = 0.508 \text{ m}$$

Note:

1 inch = 2.54 cm

20 inches = 50.8 cm

50.8 cm = 0.508 m

Therefore, for a strip of air photos flown at a scale of 1:4000 and scanned at a resolution of 200 dpi, in digital form, each photo pixel has a resolution of 0.508 m.