

Scanning - File size and resolution

size of original	DPI	bitmap	grayscale	RGB	CMYK
35mm:	120	3 K	19 K	57 K	76 K
	170	6 K	38 K	114 K	152 K
	220	9 K	64 K	191 K	254 K
	300	16 K	118 K	353 K	470 K
	400	27 K	210 K	628 K	838 K
	500	42 K	327 K	1.03 MB	1.31 MB
	600	60 K	471 K	1.38 MB	1.88 MB
	1000	164 K	1.31 MB	3.92 MB	5.23 MB
	1500	369 K	2.94 MB	8.83 MB	11.8 MB
	2000	655 K	5.23 MB	15.7 MB	20.9 MB
4x5:	72	13 K	102 K	304 K	405 K
	100	25 K	196 K	586 K	782 K
	120	36 K	281 K	844 K	1.1 MB
	170	72 K	564 K	1.65 MB	2.21 MB
	220	119 K	945 K	2.77 MB	3.69 MB
	300	221 K	1.72 MB	5.15 MB	6.87 MB
	400	392 K	3.05 MB	9.16 MB	12.2 MB
	600	880 K	6.87 MB	20.6 MB	27.5 MB
	800	1.53 MB	12.2 MB	36.6 MB	48.8 MB
	1000	2.38 MB	19.1 MB	57.2 MB	76.3 MB
5x7:	72	23 K	178 K	532 K	709 K
	100	44 K	342 K	1.00 MB	1.34 MB
	120	62 K	493 K	1.44 MB	1.92 MB
	170	125 K	988 K	2.89 MB	3.86 MB
	220	208 K	1.62 MB	4.85 MB	6.46 MB
	300	386 K	3.00 MB	9.01 MB	12.0 MB
	400	684 K	5.34 MB	16.0 MB	21.4 MB
	600	1.5 MB	12.0 MB	36.1 MB	48.1 MB
8x10:	72	51 K	405 K	1.19 MB	1.58 MB
	100	98 K	782 K	2.29 MB	3.05 MB
	120	141 K	1.10 MB	3.30 MB	4.39 MB
	170	282 K	2.21 MB	6.62 MB	8.82 MB
	220	473 K	3.69 MB	11.1 MB	14.8 MB
	300	879 K	6.87 MB	20.6 MB	27.5 MB
	400	1.56 MB	12.2 MB	36.6 MB	48.8 MB
	600	3.52 MB	27.5 MB	82.4 MB	109.9 MB
11x14:	170	544 K	4.25 MB	12.8 MB	17 MB
	220	912 K	7.11 MB	21.4 MB	28.5 MB
	300	1.7 MB	13.3 MB	39.7 MB	52.9 MB
	400	2.94 MB	23.5 MB	70.5 MB	94 MB

Handy Formulae:

Scan Resolution = Desired Final Resolution x (Final Size/Original Size)

For Halftones:

Desired Final Resolution = 2 x halftone line screen of the printer (see below)

Printer	Halftone Freq. (lpi)
300 dpi Laser Printers	65
600 dpi Laser Printers	85
Typical Newspaper	85-100
Typical Magazine & Flyers	133
High-end Magazine	150-200

For Line Art:

Desired Final Resolution = 300dpi to 1000dpi when going to print. Use 72 dpi for screen use. Line Art requires more resolution than either grayscale or color images when printing.