

A Rosetta Stone for the new digital media crossover age

Did you know that a Standard definition American NTSC video frame prints to 2.4" x 1.6" at 300dpi?, How about a 4k shot covering 347mm x 183mm also at 300dpi? or that to fill a half page spread in a European magazine you need 4.35 megapixels? As part of my research into the crossover between still and video I have made this translation table to help you understand how Image size, megapixels, dpi and repro sizes relate to each other:

The Magic Repro Standard 300dpi (150 line screen)

	Camera	Pixel count		Megapixels	Print size @ 300dpi	
		width	height		inches	mm
Video	SD NTSC	720	480	0.35	2.40" x 1.60"	61 x 41
	SD Pal	720	576	0.41	2.40" x 1.92"	61 x 49
	HD	1920	1080	2.07	6.40" x 3.60"	163 x 91
	UHD	3840	2160	8.29	12.80" x 7.20"	325 x 183
	4k	4096	2160	8.85	13.65" x 7.20"	347 x 183
	5k	5120	2880	14.75	17.07" x 9.60"	433 x 244
	6k	6144	3160	19.42	20.48" x 10.53"	520 x 268
	8k	7680	4320	33.18	25.60" x 14.40"	650 x 366

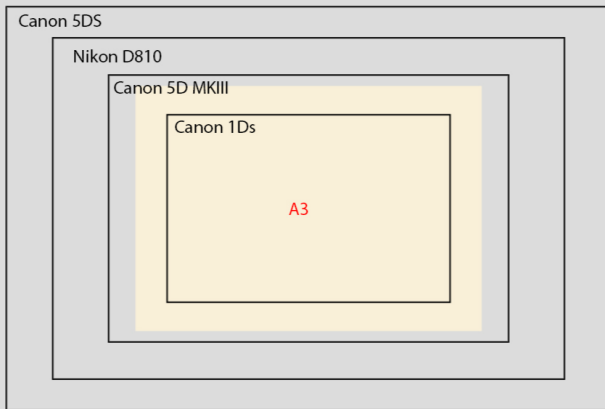
Stills	Canon 1Ds	4064	2704	10.99	13.55" x 9.01"	344 x 229
	Canon 5D MKIII	5760	3840	22.12	19.20" x 12.80"	488 x 325
	Nikon 800e/ 810	7360	4912	36.15	24.53" x 16.37"	623 x 416
	Canon 5Ds / sr	8688	5792	50.32	28.96" x 19.31"	736 x 490

Repro	Size	width	height	Megapixels required	Page size	
(Europe)	A3 Double page spread	4961	3508	17.40	16.50" x 11.70"	297 x 420
	A4 Full page	2481	3508	8.70	8.30" x 11.70"	210 x 297
	A5 Half Page	2481	1754	4.35	8.30" x 5.80"	148 x 210
	A6 Quarter page	1241	1754	2.18	5.80" x 4.10"	105 x 148
(US) eg. Scientific American Magazine	Double page spread	4800	3150	15.12	10.50" x 16"	
	Full page	2400	3150	7.56	8" x 10.5"	
	Half page	2400	1575	3.78	5.25" x 8"	
	Quarter page	1575	1200	1.89	5.25" x 4"	

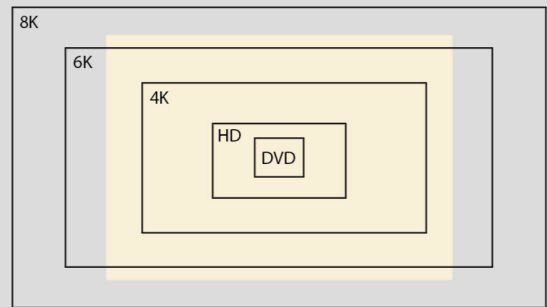
Final repro quality depends on the actual image quality, a poor quality image will always look poor!

"a picture is only as good as it looks" - Stephen Johnson

Printed area coverage at 300dpi compared to A3 (420mmx297mm)



Still Cameras



Video Cameras

Stephen Johnson www.copyrightimage.com

Please feel free to share, just keep the attribution in.

Many thanks

Stephen Johnson

Stephen@copyrightimage.co.uk

www.copyrightimage.co.uk