

Comprehensive Resolution/Image Area Overview of ARRI digital motion picture cameras



Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		Clip Image Area (mm)		Sensor Resolution (photosites used)		Sensor Image Area (mm)		Sensor Image Area (inch)		Sensor Diameter (mm)	Sensor Diameter (inch)	Frame Size in MB	Frame Size in Byte
16:9 mode																	
DNxHD	HD (1920x1080)	1920	1080	1920	1080	15,84	8,91	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	HD (1920x1080)	1920	1080	1920	1080	15,84	8,91	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	ProRes	2K (2048x1152)	2048	1152	2048	1152	16,90	9,50	2868	1614	23,66	13,32	0,932	0,524	27,15	1,069	-
ARRIRAW	3.2K (3164x1778)	3164	1778	3200 ¹	1782	26,40	14,70	3168	1782	26,14	14,70	1,029	0,579	29,99	1,181	-	-
	2.8K	2880	1620	2880	1620	23,76	13,37	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	7,0	7.008.640
4:3 mode																	
ProRes	2K (2048x1536)	2048	1536	2048	1536	16,90	12,67	2868	2152	23,66	17,75	0,932	0,699	29,58	1,165	-	-
ARRIRAW	Cropped	2578	2160	2578	2160	21,27	17,82	2578	2160	21,27	17,82	0,837	0,702	27,75	1,092	8,4	8.402.176
	Full	2880	2160	2880	2160	23,76	17,82	2880	2160	23,76	17,82	0,935	0,702	29,70	1,169	9,3	9.341.440
Open Gate mode																	
ARRIRAW	OpenGate	3414	2198	3424	2202	28,25	18,17	3424	2202	28,25	18,17	1,112	0,715	33,59	1,322	11,3	11.319.712

¹ clip padding: 18px left and right; 2px top and bottom



Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		Clip Image Area (mm)		Sensor Resolution (photosites used)		Sensor Image Area (mm)		Sensor Image Area (inch)		Sensor Diameter (mm)	Sensor Diameter (inch)	Frame Size in MB	Frame Size in Byte
16:9 mode																	
ProRes	HD	1920	1080	1920	1080	15,84	8,91	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	2K	2048	1152	2048	1152	16,90	9,50	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	3.2K	3200	1800	3200	1824 ²	26,40	15,05	3200	1800	26,40	14,85	1,039	0,585	30,29	1,193	-	-
	4K UHD	3840	2160	3840	2160	31,68	17,82	3200	1800	26,40	14,85	1,039	0,585	30,29	1,193	-	-
ARRIRAW	2.8K	2880	1620	2880	1620	23,76	13,37	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	7,2	7.218.472
	3.2K	3168	1782	3168	1782	26,14	14,70	3168	1782	26,14	14,70	1,029	0,579	29,99	1,181	8,7	8.688.136
4:3 mode																	
ProRes	2.8K	2880	2160	2944 ³	2176	24,29	17,95	2880	2160	23,76	17,82	0,935	0,702	29,70	1,169	-	-
ARRIRAW	2.8K	2880	2160	2880	2160	23,76	17,82	2880	2160	23,76	17,82	0,935	0,702	29,70	1,169	9,6	9.551.272
6:5 mode																	
ProRes	2K Anamorphic	2048	858	2048	858	16,90	7,08	2560	2146	21,12	17,70	0,831	0,697	27,56	1,085	-	-
	4K Cine Anamorphic	4096	1716	4096	1716	33,79	14,16	2560	2146	21,12	17,70	0,831	0,697	27,56	1,085	-	-
ARRIRAW	2.6K	2578	2160	2592	2160	21,38	17,82	2592	2160	21,38	17,82	0,842	0,702	27,84	1,096	8,6	8.618.152
Open Gate mode																	
ProRes	3.4K	3424	2202	3456 ⁴	2202	28,51	18,17	3424	2202	28,25	18,17	1,112	0,715	33,59	1,322	-	-
ARRIRAW	3.4K	3424	2202	3424	2202	28,25	18,17	3424	2202	28,25	18,17	1,112	0,715	33,59	1,322	11,5	11.529.544

² clip padding: 24px bottom

³ clip padding: 32px left and right; 16px bottom

⁴ clip padding: 16px left and right



Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		Clip Image Area (mm)		Sensor Resolution (photosites used)		Sensor Image Area (mm)		Sensor Image Area (inch)		Sensor Diameter (mm)	Sensor Diameter (inch)	Frame Size in MB	Frame Size in Byte
MPEG-2 (AMIRA only)	HD	1920	1080	1920	1080	15,84	8,91	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
ProRes	516 HD	1920	1080	1920	1080	15,84	8,91	1600	900	13,2	7,425	0,520	0,292	15,14	0,596	-	-
	HD	1920	1080	1920	1080	15,84	8,91	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	HD Ana.*	1920	1080	1920	1080	15,84	8,91	1920	2160	15,84	17,82	0,624	0,702	23,84	0,939	-	-
	2K	2048	1152	2048	1152	16,90	9,50	2868	1612	23,66	13,30	0,932	0,524	27,14	1,069	-	-
	2.39:1 2K Ana.*	2048	858	2048	858	16,90	7,08	2560	2145	21,12	17,70	0,831	0,697	27,55	1,085	-	-
	4:3 2.8K*	2880	2160	2944 ⁵	2160	24,29	17,82	2880	2160	23,76	17,82	0,935	0,702	29,70	1,169	-	-
	3.2K	3200	1800	3200	1800	26,40	14,85	3200	1800	26,40	14,85	1,039	0,585	30,29	1,193	-	-
	4K UHD	3840	2160	3840	2160	31,68	17,82	3200	1800	26,40	14,85	1,039	0,585	30,29	1,193	-	-
MXF/ARRIRAW (ALEXA Mini only)	16:9 HD Ana. (OG 3.4K)	1920	2160	1920	2160	15,84	17,82	3424 ⁶	2202	15,84	17,82	0,624	0,702	23,84	0,939	11,5	11.529.544
	2.39:1 2K Ana. (OG 3.4K)	2560	2145	2560	2145	21,12	17,70	3424 ⁶	2202	21,12	17,70	0,831	0,697	27,55	1,085	11,5	11.529.544
	2.8K	2880	1620	2880	1620	23,76	13,37	2880	2160	23,76	17,82	0,935	0,702	29,70	1,169	7,2	7.218.472
	4:3 2.8K (OG 3.4K)	2880	2160	2880	2160	23,76	17,82	3424 ⁶	2202	23,76	17,82	0,935	0,702	29,70	1,169	11,5	11.529.544
ARRIRAW	Open Gate 3.4K	3424	2202	3424	2202	28,25	18,17	3424	2202	28,25	18,17	1,112	0,715	33,59	1,322	11,5	11.529.544

⁵ clip padding: 32px left and right

⁶ for all (OG 3.4K) formats: active image size determined by metadata, recording always full Open Gate (3424x2202)



Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		Clip Image Area (mm)		Sensor Resolution (photosites used)		Sensor Image Area (mm)		Sensor Image Area (inch)		Sensor Diameter (mm)	Sensor Diameter (inch)	Frame Size in MB	Frame Size in Byte
ARRIRAW	Open Gate	6560	3100	6560	3100	54,12	25,58	6560	3100	54,12	25,58	2,131	1,007	59,86	2,357	30,5	30.508.096
	16:9 (1.78)	5120	2880	5120	2880	42,24	23,76	5120	2880	42,24	23,76	1,663	0,935	48,46	1,908	22,1	22.122.496
	3:2 (1.50)	4320	2880	4320	2880	35,64	23,76	4320	2880	35,64	23,76	1,403	0,935	42,83	1,686	18,7	18.666.496