

Formats and Resolutions Overview of ARRI digital motion picture cameras

ALEXA LFP & ALEXA MINI LFP

Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		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
LF 16:9															
ProRes	HD	1920	1080	1920	1080	3840	2160	31.68	17.82	1.247	0.702	36.35	1.431	-	-
ProRes	2K	2048	1152	2048	1152	3840	2160	31.68	17.82	1.247	0.702	36.35	1.431	-	-
ProRes	4K UHD	3840	2160	3840	2160	3840	2160	31.68	17.82	1.247	0.702	36.35	1.431	-	-
ARRIRAW	4K UHD	3840	2160	3840	2160	3840	2160	31.68	17.82	1.247	0.702	36.35	1.431	12.7	12.661.672
LF 2.39:1															
ProRes	Scope 4.5K	4448	1856	4480 ¹	1856	4448	1856	36.70	15.31	1.445	0.603	39.76	1.565	-	-
ARRIRAW	Scope 4.5K	4448	1856	4448	1856	4448	1856	36.70	15.31	1.445	0.603	39.76	1.565	12.6	12.603.304
LF Open Gate															
ProRes	OG 4.5K	4448	3096	4480 ¹	3096	4448	3096	36.70	25.54	1.445	1.006	44.71	1.760	-	-
ARRIRAW	OG 4.5K	4448	3096	4448	3096	4448	3096	36.70	25.54	1.445	1.006	44.71	1.760	20.9	20.876.584

¹ clip padding: 16px left and right;

ALEXA SXT

Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		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	2880	1620	23.76	13.37	0.935	0.526	27.26	1.073	-	-
	2K	2048	1152	2048	1152	2880	1620	23.76	13.37	0.935	0.526	27.26	1.073	-	-
	3.2K	3200	1800	3200	1824 ²	3200	1800	26.40	14.85	1.039	0.585	30.29	1.193	-	-
	4K UHD	3840	2160	3840	2160	3200	1800	26.40	14.85	1.039	0.585	30.29	1.193	-	-
ARRIRAW	2.8K	2880	1620	2880	1620	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	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	2880	2160	23.76	17.82	0.935	0.702	29.70	1.169	-	-
ARRIRAW	2.8K	2880	2160	2880	2160	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	2560	2146	21.12	17.70	0.831	0.697	27.56	1.085	-	-
	4K Cine Anamorphic	4096	1716	4096	1716	2560	2146	21.12	17.70	0.831	0.697	27.56	1.085	-	-
ARRIRAW	2.6K	2578	2160	2592	2160	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	3424	2202	28.25	18.17	1.112	0.715	33.59	1.322	-	-
	4K Cine	4096	2636	4096	2636	3414	2198	28.17	18.13	1.109	0.714	33.50	1.319	-	-
	3.4K	3424	2202	3424	2202	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

AMIRA® & ALEXA MINI

Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		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	2880	1620	23.76	13.37	0.935	0.526	27.26	1.073	-	-
ProRes	516 HD	1920	1080	1920	1080	1600	900	13.2	7.425	0.520	0.292	15.14	0.596	-	-
	HD Ana.*	1920	1080	1920	1080	2880	1620	23.76	13.37	0.935	0.526	27.26	1.073	-	-
	HD Ana.*	1920	1080	1920	1080	1920	2160	15.84	17.82	0.624	0.702	23.84	0.939	-	-
	2K	2048	1152	2048	1152	2868	1612	23.66	13.30	0.932	0.524	27.14	1.069	-	-
	2.39:1 2K Ana.*	2048	858	2048	858	2560	2145	21.12	17.70	0.831	0.697	27.55	1.085	-	-
	4.3 2.8K*	2880	2160	2944 ⁵	2160	2880	2160	23.76	17.82	0.935	0.702	29.70	1.169	-	-
	3.2K	3200	1800	3200	1800	3200	1800	26.40	14.85	1.039	0.585	30.29	1.193	-	-
4K UHD	3840	2160	3840	2160	3200	1800	26.40	14.85	1.039	0.585	30.29	1.193	-	-	
MXF/ARRIRAW	16:9 HD Ana. (OG 3.4K)*	1920	2160	1920	2160	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	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	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	3424 ⁶	2202	23.76	17.82	0.935	0.702	29.70	1.169	11.5	11.529.544
	Open Gate 3.4K*	3424	2202	3424	2202	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)

Formats and Resolutions Overview of ARRI digital motion picture cameras

ALEXA 65

Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		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	4K UHD	3840	2160	3840	2160	3840	2160	31,68	17,82	1,247	0,702	36,35	1,431	12,7	12.661.672
	4.3K	4320	2880	4320	2880	4320	2880	35,64	23,76	1,403	0,935	42,83	1,686	18,7	18.882.472
	LF Open Gate	4448	3096	4448	3096	4448	3096	36,70	25,54	1,44	1,01	44,71	1,76	20,9	20.876.584
	5.1K	5120	2880	5120	2880	5120	2880	42,24	23,76	1,663	0,935	48,46	1,908	22,1	22.338.472
	Open Gate	6560	3100	6560	3100	6560	3100	54,12	25,58	2,131	1,007	59,86	2,357	30,5	30.724.072

ALEXA XT

Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		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	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
ProRes	HD (1920x1080)	1920	1080	1920	1080	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	2K (2048x1152)	2048	1152	2048	1152	2868	1614	23,66	13,32	0,932	0,524	27,15	1,069	-	-
	3.2K (3164x1778)	3164	1778	3200 ¹	1782	3168	1782	26,14	14,70	1,029	0,579	29,99	1,181	-	-
ARRIRAW	2.8K	2880	1620	2880	1620	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	2868	2152	23,66	17,75	0,932	0,699	29,58	1,165	-	-
ARRIRAW	Cropped	2578	2160	2592	2160	2592	2160	21,27	17,82	0,837	0,702	27,75	1,092	8,4	8.402.176
	Full	2880	2160	2880	2160	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	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

ALEXA®

Format	Resolution	Active Image Resolution (pixels)		Container Resolution (pixels)		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	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
ProRes	HD (1920x1080)	1920	1080	1920	1080	2880	1620	23,76	13,37	0,935	0,526	27,26	1,073	-	-
	2K (2048x1152)	2048	1152	2048	1152	2868	1614	23,66	13,32	0,932	0,524	27,15	1,069	-	-
ARRIRAW (external)	2.8K	2880	1620	2880	1620	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	2868	2152	23,66	17,75	0,932	0,699	29,58	1,165	-	-
ARRIRAW (external)	2.8K	2880	2160	2880	2160	2880	2160	23,76	17,82	0,935	0,702	29,70	1,169	9,3	9.341.440