

Video Bitrate & File Size Charts

Bitrate is the amount of data that is being sent to the viewer per second and in our chart below is measured in Mega Bits per Second (Mbs). Typically the higher the bit rate, the higher quality the video but that really depends on the choice of codec as H.264 has very low bit rates but also quite high quality. It requires more computer processing power to encode and decode than most other codecs. Nearly all the bitrates in the chart are consider variable bitrates (VBR) which means that the video bitrate will actually be lower than the target unless needed. Video that contains a lot of movement and color will typically require the full bitrate and in some cases require an even higher bitrate to make the video sharp.



Frame dimensions	Frame rate	Apple ProRes 4444 data rate	Apple ProRes 422 (HQ) data rate	Apple ProRes 422 data rate	Apple ProRes 422 (LT) data rate	Apple ProRes 422 (Proxy) data rate	XDCAM HQ MPEG MP@HL 4:2:0 color	XDCAM HD422 MPEG 422P@HL 4:2:2 color	MPEG2 Program Stream source file to Aberdeen	DV & HDV	Web/H.264 what is used for YouTube and others	Broadcast TV Stations playserver files 4:2:0 and 4:2:2
720 x 486	29.97 fps	94 Mpbs	63 Mpbs	42 Mpbs	29 Mpbs	12 Mpbs			25Mbs	25Mbs DV Codec	.8Mbs	6-18Mbs 12Mbs avg.
1280 x 720	29.97 fps	165 Mpbs	110 Mpbs	73 Mpbs	51 Mpbs	23 Mpbs		50Mbs CBR		25Mbs HDV/MPEG2		18-30Mbs 25Mbs avg.
1440 x 1080	29.97 fps	283 Mpbs	189 Mpbs	126 Mpbs	87 Mpbs	38 Mpbs	35Mpbs VBR		50Mbs	25Mbs HDV/MPEG2	2.2Mbs	
1920 x 1080	29.97 fps	330 Mpbs	220 Mpbs	147 Mpbs	102 Mpbs	45 Mpbs		50Mbs CBR	50Mbs	25Mbs HDV/MPEG2	3.8Mbs	18-30Mbs 25Mbs avg.

30 Min Program	1 Mbs	5 Mbs	12 Mbs	18 Mbs	25 Mbs	30 Mbs	50 Mbs	75 Mbs	100 Mbs	150 Mbs		
File Size	225 MB	1.1 GB	2.7 GB	4.0 GB	5.6 GB	6.8 GB	11.2 GB	16.8 GB	22.4 GB	33.6 GB		

