



## Digital Video Comparisons

## High Definition Camcorders



	miniDV	DVD	FLASH MEMORY		HDD
Specifications	VIXIA HV30	VIXIA HR10	VIXIA HF100	VIXIA HF10	VIXIA HG10
<b>Format</b>	HDV/DV	AVCHD*	AVCHD*	AVCHD*	AVCHD*
<b>Recording Media</b>	MiniDV	DVD-R/-RW/-R DL	Flash Memory	Dual Flash Memory	HDD
<b>Minimum Lux Rating</b>	3 LUX	3 LUX	3 LUX	3 LUX	3 LUX
<b>Internal Storage</b>	-	-	-	16GB	40GB
<b>Image Sensor</b>	1/2.7" CMOS	1/2.7" CMOS	1/3.2" CMOS	1/3.2" CMOS	1/2.7" CMOS
<b>Total Pixels</b>	Approx. 2.96 Megapixels CMOS	Approx. 2.96 Megapixels CMOS	Approx. 3.3 Megapixels CMOS	Approx. 3.3 Megapixels CMOS	Approx. 2.96 Megapixels CMOS
<b>Effective Pixels</b>	Movie: Approx. 2.07 Megapixels (1920 x 1080) Still Images: Approx. 2.76 Megapixels (1920 x 1440)	Movie: Approx. 2.07 Megapixels (1920 x 1080) Still Images: Approx. 2.76 Megapixels (1920 x 1440)	Movie: Approx. 2.07 Megapixels (1920 x 1080) Still Images: Approx. 2.76 Megapixels (1920 x 1440)	Movie: Approx. 2.07 Megapixels (1920 x 1080) Still Images: Approx. 2.76 Megapixels (1920 x 1440)	Movie: Approx. 2.07 Megapixels (1920 x 1080) Still Images: Approx. 2.76 Megapixels (1920 x 1440)
<b>Full HD 1920 x 1080 Movie Recording</b>	-	-	Yes	Yes	-
<b>Image Processor</b>	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II
<b>Image Stabilizer</b>	SuperRange Optical Image Stabilizer	SuperRange Optical Image Stabilizer	SuperRange Optical Image Stabilizer	SuperRange Optical Image Stabilizer	SuperRange Optical Image Stabilizer
<b>Zoom Ratio (Optical/Digital)</b>	10x/200x	10x/200x	12x/200x	12x/200x	10x/200x
<b>Smooth Zoom Control</b>	Yes	Yes	Yes	Yes	Yes
<b>Minimum Focusing Distance (Wide/Tele)</b>	10mm/1m	10mm/1m	10mm/1m	10mm/1m	10mm/1m
<b>Instant AF</b>	Yes	Yes	Yes	Yes	Yes
<b>LCD Screen</b>	2.7" Multi-Angle Vivid Widescreen LCD (Approx. 211,000 pixels)	2.7" Multi-Angle Vivid Widescreen LCD (Approx. 211,000 pixels)	2.7" Multi-Angle Vivid Widescreen LCD (Approx. 211,000 pixels)	2.7" Multi-Angle Vivid Widescreen LCD (Approx. 211,000 pixels)	2.7" Multi-Angle Vivid Widescreen LCD (Approx. 211,000 pixels)
<b>Viewfinder</b>	0.27" Widescreen Colour EVF (Approx. 123,000 pixels)	0.27" Widescreen Colour EVF (Approx. 123,000 pixels)	-	-	0.27" Widescreen Colour EVF (Approx. 123,000 pixels)
<b>Quick Start</b>	-	Yes	Yes	Yes	Yes
<b>HDMI Terminal</b>	Yes	Yes	Yes	Yes	Yes
<b>24p Cinema Mode</b>	Yes	Yes	Yes	Yes	Yes
<b>30p Progressive Mode</b>	Yes	-	Yes	Yes	-
<b>Program AE Modes</b>	Yes	Yes	Yes	Yes	Yes
<b>Level Shot Control</b>	Yes	Yes	Yes	Yes	Yes
<b>Still Image Recording</b>	Large (2048 x 1536), Large Wide (1920 x 1080) Medium (1440 x 1080), Small (640 x 480)	Large (2048 x 1536), Large Wide (1920 x 1080) Medium (1440 x 1080), Small (640 x 480)	Large (2048 x 1536), Large Wide (1920 x 1080) Medium (1440 x 1080), Small (640 x 480)	Large (2048 x 1536), Large Wide (1920 x 1080) Medium (1440 x 1080), Small (640 x 480)	Large (2048 x 1536), Large Wide (1920 x 1080) Medium (1440 x 1080), Small (640 x 480)
<b>Memory Card Slot</b>	MiniSD	MiniSD	SDHC	SDHC	MiniSD
<b>Remote Control</b>	Yes	Yes	Yes	Yes	Yes
<b>Included Digital Video Solution Disk</b>	Yes	Yes	Yes	Yes	Yes
<b>Included Video Editing Software</b>	-	Yes	Yes	Yes	Yes
<b>USB Terminal (supports PictBridge)</b>	USB 2.0 Full-Speed	USB 2.0 Hi-Speed	USB 2.0 Hi-Speed	USB 2.0 Hi-Speed	USB 2.0 Hi-Speed
<b>Built-in Lens Cover</b>	Electronic	Electronic	Electronic	Electronic	Electronic
<b>Built-in Light</b>	Yes (White LED)	Yes (White LED)	Yes (White LED)	Yes (White LED)	Yes (White LED)
<b>Advanced Accessory Shoe</b>	Yes	-	Yes (mini)	Yes (mini)	Yes
<b>MIC Terminal</b>	Yes	-	Yes (manual audio level control)	Yes (manual audio level control)	Yes
<b>Dimensions</b>	Approx. 3.5 x 3.2 x 5.4 in./ 88 x 82 x 138mm	Approx. 2.6 x 3.7 x 5.2 in./ 65 x 93 x 133mm	Approx. 2.9 x 2.5 x 5.1 in./ 73 x 64 x 129mm	Approx. 2.9 x 2.5 x 5.1 in./ 73 x 64 x 129mm	Approx. 3.2 x 3.0 x 5.1 in./ 81 x 75 x 129mm
<b>Weight (Body Only)</b>	Approx. 1.2 lb./535g	Approx. 1.2 lb./530g	TBD	TBD	Approx. 1.1 lb./505g

\* High Definition footage in the AVCHD format can be finalized in camera or copied onto DVD media with included software. However, DVD media containing AVCHD footage should only be used in AVCHD compatible players otherwise the DVD player may fail to eject the media and may erase its contents without warning.

### Key Technology Highlights



Dual Flash Memory camcorders take video to the next level by recording on an internal Flash drive as well as a removable SDHC memory card. They offer superior performance with fast response times, expandable & flexible media, lower risk of data loss and silent operation all in a compact and lightweight body!



Canon High Definition camcorders not only capture images in Full HD, but record and output at 1920 x 1080 as well, so you get Full HD from lens to screen. With no loss of detail, your memories are preserved in stunning clarity and ready for playback on your HDTV.



The new Intelligent Lithium-ion Battery accurately indicates remaining battery time down to the minute. No more guessing about how much recording time you have left.



Canon designed its exclusive DIGIC DV image processing technology specifically for superior image quality, and the technology reaches a new level of excellence in the next generation: DIGIC DV II. Color reproduction is rich and accurate, especially in skin tones and scenes that are particularly dark or light. An advanced hybrid noise reduction system creates images with exceptional clarity.



Achieve a Professional film look with 24p Cinema Mode - a combination of two features which adjust film frame rate and colour & tonal characteristics to evoke the look and feel of a big screen movie. 30p Progressive Mode delivers clarity to fast-action subjects like news and sports, and is the perfect frame rate for clips intended to be posted on the web.



Canon's Instant Autofocus system delivers fast, accurate focus, even when you're shooting in bright light, at night, or with the camera in motion. The revolutionary hybrid system combines an external sensor with Canon's proven high-performance AF system to dramatically decrease focusing time and ensure consistently sharp video.



# Digital Video Comparisons

## Standard Definition Camcorders



Specifications	ZR900	miniDV ZR930	ZR950	DC310	DVD DC320	DC330	FS100	FLASH MEMORY FS10	FS11	
<b>Format</b>	DV	DV	DV	DVD-VIDEO (VR)	DVD-VIDEO (VR)	DVD-VIDEO (VR)	MPEG-2 (SD-VIDEO)	MPEG-2 (SD-VIDEO)	MPEG-2 (SD-VIDEO)	
<b>Recording Media</b>	MiniDV	MiniDV	MiniDV	DVD-R/-RW/-R DL	DVD-R/-RW/-R DL	DVD-R/-RW/-R DL	Dual Flash Memory	Dual Flash Memory	Dual Flash Memory	
<b>Minimum Lux Rating</b>	1.6 LUX	2.1 LUX	2.1 LUX	1.3 LUX	2 LUX	2 LUX	2.1 LUX	2.1 LUX	2.1 LUX	
<b>Internal Storage</b>	-	-	-	-	-	-	-	8GB	16GB	
<b>Image Sensor</b>	1/6" CCD	1/6" CCD	1/6" CCD	1/6" CCD	1/6" CCD	1/6" CCD	1/6" CCD	1/6" CCD	1/6" CCD	
<b>Total Pixels</b>	Approx. 680,000 Pixels CCD	Approx. 1.07 Megapixels CCD	Approx. 1.07 Megapixels CCD	Approx. 680,000 Pixels CCD	Approx. 1.07 Megapixels CCD	Approx. 1.07 Megapixels CCD	Approx. 1.07 Megapixels CCD	Approx. 1.07 Megapixels CCD	Approx. 1.07 Megapixels CCD	
<b>Effective Pixels</b>	Movie Recording: Advanced Zoom ON (16:9): 0.45 Megapixels (WIDE)/ 0.36 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.36 Megapixels; Still Capture: 0.45 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.45 Megapixels (WIDE)/ 0.36 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.36 Megapixels; Still Capture: 0.45 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels	Movie Recording: Advanced Zoom ON (16:9): 0.71 Megapixels (WIDE)/ 0.41 Megapixels (TELE); Advanced Zoom OFF (16:9): 0.55 Megapixels; Still Capture: 0.8 Megapixels
<b>Image Processor</b>	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	DIGIC DV II	
<b>Image Stabilizer</b>	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	Electronic Image Stabilizer	
<b>Advanced Zoom (16:9)</b>	41x	48x	48x	41x	48x	48x	48x	48x	48x	
<b>Zoom Ratio (Optical/Digital)</b>	37x/2000x	37x/2000x	37x/2000x	37x/2000x	37x/2000x	37x/2000x	37x/2000x	37x/2000x	37x/2000x	
<b>Smooth Zoom Control</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Minimum Focusing Distance (Wide/Tele)</b>	10mm/1m	10mm/1m	10mm/1m	10mm/1m	10mm/1m	10mm/1m	10mm/1m	10mm/1m	10mm/1m	
<b>LCD Screen</b>	2.7" Widescreen LCD (Approx. 112,000 pixels)	2.7" Widescreen LCD (Approx. 112,000 pixels)	2.7" Widescreen LCD (Approx. 112,000 pixels)	2.7" Widescreen LCD (Approx. 112,000 pixels)	2.7" Widescreen LCD (Approx. 112,000 pixels)	2.7" Widescreen LCD (Approx. 112,000 pixels)	2.7" Widescreen LCD (Approx. 123,000 pixels)	2.7" Widescreen LCD (Approx. 123,000 pixels)	2.7" Widescreen LCD (Approx. 123,000 pixels)	
<b>Viewfinder</b>	0.35" Widescreen EVF (Approx. 114,000 pixels)	0.35" Widescreen EVF (Approx. 114,000 pixels)	0.35" Widescreen EVF (Approx. 114,000 pixels)	0.35" Widescreen EVF (Approx. 114,000 pixels)	0.35" Widescreen EVF (Approx. 114,000 pixels)	0.35" Widescreen EVF (Approx. 114,000 pixels)	-	-	-	
<b>Quick Start</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Program AE Modes</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Level Shot Control</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Still Image Recording</b>	-	-	Small (640 x 480)	Small (640 x 480)	Large Wide (1152 x 864) Large (1152 x 648) Small (640 x 480)	Large Wide (1152 x 864) Large (1152 x 648) Small (640 x 480)	Large Wide (1152 x 864) Large (1152 x 648) Small (640 x 480)	Large Wide (1152 x 864) Large (1152 x 648) Small (640 x 480)	Large Wide (1152 x 864) Large (1152 x 648) Small (640 x 480)	
<b>Memory Card Slot</b>	-	-	SDHC	SDHC	SDHC	SDHC	SDHC	SDHC	SDHC	
<b>Remote Control</b>	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	
<b>Included Digital Video Solution Disk</b>	-	-	Yes	-	-	Yes	Yes	Yes	Yes	
<b>Included Video Editing Software</b>	-	-	-	-	-	Yes	Yes	Yes	Yes	
<b>USB Terminal (supports PictBridge)</b>	-	-	USB 2.0 Hi-Speed	-	-	USB 2.0 Hi-Speed	USB 2.0 Hi-Speed	USB 2.0 Hi-Speed	USB 2.0 Hi-Speed	
<b>Built-in Lens Cover</b>	Manual	Manual	Manual	Manual	Manual	Manual	Electronic	Electronic	Electronic	
<b>Built-in Light</b>	Yes (LCD)	Yes (LCD)	Yes (LCD)	Yes (LCD)	Yes (LCD)	Yes (LCD)	Yes (White LED)	Yes (White LED)	Yes (White LED)	
<b>MIC Terminal</b>	Yes	Yes	-	-	-	-	Yes	Yes	Yes	
<b>Dimensions</b>	Approx. 2.7 x 3.2 x 5.0 in./ 68 x 82 x 127mm	Approx. 2.7 x 3.2 x 5.0 in./ 68 x 82 x 127mm	Approx. 2.7 x 3.2 x 5.0 in./ 68 x 82 x 127mm	Approx. 2.6 x 3.5 x 5.0 in./ 66 x 90 x 126mm	Approx. 2.6 x 3.5 x 5.0 in./ 66 x 90 x 126mm	Approx. 2.6 x 3.5 x 5.0 in./ 66 x 90 x 126mm	Approx. 2.3 x 2.4 x 4.9 in./ 58 x 60 x 124mm	Approx. 2.3 x 2.4 x 4.9 in./ 58 x 60 x 124mm	Approx. 2.3 x 2.4 x 4.9 in./ 58 x 60 x 124mm	
<b>Weight (Body Only)</b>	Approx. 13.8 oz./390g	Approx. 13.8 oz./390g	Approx. 13.8 oz./390g	Approx. 13.4 oz./380g	Approx. 13.4 oz./380g	Approx. 13.4 oz./380g	Approx. 9.3 oz./265g	Approx. 9.3 oz./265g	Approx. 9.3 oz./265g	

\* High Definition footage in the AVCHD format can be finalized in camera or copied onto DVD media with included software. However, DVD media containing AVCHD footage should only be used in AVCHD compatible players otherwise the DVD player may fail to eject the media and may erase its contents without warning.

### Key Technology Highlights



Canon's exclusive Advanced Zoom system combines Genuine Canon Optics with Canon's proprietary DIGIC DV Image Processor to let you seamlessly zoom both wide and long. Zoom up to 48x without any loss in image quality.



Canon designed its exclusive DIGIC DV image processing technology specifically for superior image quality, and the technology reaches a new level of excellence in the next generation: DIGIC DV II. Color reproduction is rich and accurate, especially in skin tones and scenes that are particularly dark or light. An advanced hybrid noise reduction system creates images with exceptional clarity.