

4K Camera Comparison

Camera	Sensor size/resolution/type	Weight (w/o lens or docked recorder)	Lens	Max moving image resolution	Max fps @ 4K	4K Raw implementation	Audio inputs	Compressed recording options	Recording media format
AJA Cion	APS-C / CMOS	6.4 lbs/2.9 kg w/o top handle	PL mount	4096x2160	120	AJA Raw via 4x 3G-SDI	Two balanced 3-pin XLR inputs	Apple ProRes 4444 or 422 (up to 30p); ProRes 422 or lower (50-60p)	AJA Pak media
ARRI Alexa 65	65mm / 13.8Mpix / CMOS	23.2 lbs/10.5 kg	XPL mount	6560x3102	27	Uncompressed ARRIRAW	—	—	Codex XR Capture Drive
Astrodesign AH-4413	1.25-inch / 8.9Mpix / CMOS	4 lbs/1.8 kg	MFT mount	3840x2160	60	None	—	—	—
Blackmagic Production Camera 4K	Super 35 (21.12 x 11.88 mm) / CMOS	3 lbs 12 oz/1.7 kg	EF mount	3840x2160	30	Compressed CinemaDNG raw	Two balanced 1/4-inch line/mic jacks	Apple ProRes 422 (HQ)	Removable 2.5-inch SSD
Blackmagic Ursa	Super 35 / (21.12 x 11.88 mm) / CMOS	16.5 lbs / 7/5 kg	Choice of EF, PL, or B4 mounts	3840x2160	80	Compressed CinemaDNG raw	Two balanced 3-pin XLR inputs	Apple ProRes 422 (HQ) at up to 880 Mbps	Dual CFast 2.0 cards
Blackmagic Studio Camera 4K	13.1 x 7.3 mm / CMOS	4.4 lbs / 2.0 kg	MFT mount	3840x2160	60	Compressed CinemaDNG raw	Two balanced 3-pin XLR inputs	—	—
Canon EOS C500	Super 35 (29.6mm diagonal) / 8.85Mpix / CMOS	4 lbs / 1.8 kg	PL or EF mount	4096x2160	60	10-bit log raw via dual 3G SDI	Two balanced 3-pin XLR inputs	Up to CBR 422P@HL HD (50 Mbps)	Dual CF cards
Canon EOS-1D C	18.1Mpix / CMOS	3 lbs 6.5 oz/1.5 kg	EF mount	4096x2160	24	None	3.5mm stereo mini-jack	4:2:2 motion JPEG	Dual CF cards
FOR-A FT-One	Super 35 / 8.8Mpix / CMOS	18 lbs 12 oz/8.5 kg	PL mount	4096x2160	900	10-bit raw DPX	—	—	SSD cartridges
GoPro Hero4 Black Edition	12Mpix / CMOS	3.1 oz / 88g	Fixed f/2.8 aspherical lens w/170-degree field of view	3840x2160	30	N	Optional 3.5mm stereo mic adapter via mini USB	H.264/MP4 (max 60 Mbps)	MicroSD (class 10+) card
IO Industries 4KSDI	APS-C/Super 35 / CMOS	1 lb 10 oz / 730g	Choice of PL, F, EF mounts	4096x2160	60	10-bit raw	—	—	—
JVC GY-HMQ10	1/2.3-inch / 8.3Mpix / CMOS	3.6 lb/1.7 kg	Fixed f2.8 10x zoom	3840x2160	60	N	Two balanced 3-pin XLR inputs	VBR H.264/MP4 four-stream recording (144 Mbps [36Mbps/stream/card])	SDHC/SDXC card
JVC GY-LS300	Super 35 / 8.3Mpix / CMOS	Unknown	MFT mount	3840x2160	30	N	Two balanced 3-pin XLR inputs with phantom power	H.264 .MOV files (150 Mbps)	SDHC/SDXC card (UHS-1 U3)

JVC GY-HM200	1/2.3-inch / 8.3Mpix / CMOS	Unknown	12x zoom lens	3840x2160	30	N	Two balanced 3-pin XLR inputs with phantom power	H.264 .MOV files (150 Mbps)	SDHC/SDXC card (UHS-1 U3)
JVC GY-HM170U	1/2.3-inch / 8.3Mpix / CMOS	Unknown	12x zoom lens	3840x2160	30	N	–	H.264 .MOV files (150 Mbps)	SDHC/SDXC card (UHS-1 U3)
KineMINI + 4K Option	Super 35 / CMOS	3.3 lbs / 1.5 kg (EF mount)	EF mount or KineMount	4096x2160	30	Compressed/ uncompressed Cineform/ CinemaDNG 12-bit raw	3.5mm stereo mini-jack	–	KineMAG
Panasonic VariCam 35	Super 35 / 8.8Mpix / MOS	11 lbs / 5.0 kg	PL mount	4096x2160	120	12-bit uncompressed VariCam Raw	Two balanced 3-pin XLR inputs	AVC-Ultra 4K onboard; ProRes 422 (HQ)	ExpressP2/ MicroP2 (2K/proxy)
Panasonic HC-X1000	1/2.3-inch / 18.9Mpix / CMOS	3.41 lb / 1.55 kg	20x zoom lens	4096x2160	24 (4K)/60 (UHD)	N	Two balanced 3-pin XLR inputs	MP4/MOV at up to 100 Mbps (4K/24p) or 150 Mbps (UHD/50-60p)	SDXC card
Panasonic Lumix DMC-GH4	17.3 x 13.0mm / MOS	1 lb 3.8 oz / 560g	MFT mount	4096x2160	24	N	3.5mm stereo mini-jack	MP4/MOV at up to 100 Mbps	SDHC/SDXC
Panasonic Lumix FZ1000	1-inch / MOS	1.8 lb / 831 g	Leica 16x zoom lens	3840x2160	30	N	3.5mm stereo mini-jack	MP4	SDHC/SDXC
Point Grey Flea3	1/2.5 inch / 8.8Mpix / CMOS	1 ounce / .04 kg	CS mount	4096x2160	21	8-/12-/16-bit raw	–	–	Records to Windows PC via USB 3.0
Red Scarlet	Super 35 (31.4mm diagonal) / 13.8Mpix / CMOS	5 lb/2.3 kg	EF mount	5120x2700	30	12-bit/16-bit Redcode Raw	Two mic-level/line-level 3.5mm mini-jacks (optional pro I/O module available)	Redcode Raw (compression ratio between 18:1 and 3:1); many more options TK with add-on Meizler Module	Redmag 1.8-inch SSD (dockable recorder)
Red Epic	Super 35 (31.4mm diagonal) / 13.8Mpix / CMOS	5 lb/2.3 kg	PL mount	5120x2700	150	12-bit/16-bit Redcode Raw	Two mic-level/line-level 3.5mm mini-jacks (optional pro I/O module available)	Redcode Raw (compression ratio between 18:1 and 3:1); many more options TK with add-on Meizler Module	Redmag 1.8-inch SSD (dockable recorder)
Red Epic Dragon	Super 35 (34.5mm diagonal)/ 19Mpix / CMOS	5 lbs./2.3 kg	Leica-M, Canon, Nikon, PL mounts	6144x3160	120	12-bit/16-bit Redcode Raw	Two mic-level/line-level 3.5mm mini-jacks (optional pro I/O module available)	Redcode Raw (compression ratio between 18:1 and 3:1); many more options TK with add-on Meizler Module	Redmag 1.8-inch SSD (dockable recorder)
Sony NEX-FS700 w/HXR-IFR5 interface unit	Super 35 / 11.6Mpix / CMOS	3 lbs 11 oz/1.7 kg	E-Mount	4096x2160	60 / 120 (in 4-second bursts)	16-bit linear raw	Two balanced 3-pin XLR inputs	AVCHD 4:2:0 (24 or 28 Mbps)	Memory Stick Pro Duo (internal); AXSM cards for AXS-R5
Sony PMW-F5	Super 35 / 11.6Mpix / CMOS	4 lbs 14 oz/2.2 kg	FZ mount w/PL adapter included	4096x2160	60*	16-bit linear raw	Two balanced 3-pin XLR inputs	XDCAM 4:2:2 (50 Mbps); SR 4:2:2 (220 Mbps); up to 4K XAVC 4:2:2 (600 Mbps)	SxS Pro+ (internal); AXSM card (dockable recorder)

Sony PMW-F55	Super 35 / 11.6Mpix / CMOS	4 lbs 14 oz/2.2 kg	FZ mount w/PL adapter included	4096x2160	30	16-bit linear raw	Two balanced 3-pin XLR inputs	XDCAM 4:2:2 (50 Mbps); SR 4:2:2 (220 Mbps); up to 4K XAVC 4:2:2 (600 Mbps)	SxS Pro+ (internal); AXSM card (dockable recorder)
Sony PMW-F65	Super 35 / 20Mpix / CMOS	11 lbs/5.0 kg	PL mount	4096x2160	60	16-bit linear raw	None (Dockable SR-R4 recorder has XLR inputs)	12-bit SR Codec (220Mbps - 880 Mbps)	SRMemory card (dockable recorder)
Sony PXW-Z100	1/2.3-inch / 8.8Mpix / CMOS	< 7 lbs	20x Sony G lens	4096x2160	60	N	Unknown	4K/QFHD/HD (XAVC Intra 422 MXF); QFHS (XAVC Long) (mid 2014); HD (XAVC Long) (mid 2014)	Sony X series XQD memory cards (dual configuration)
Sony PXW-FS7	Super 35 / 8.8Mpix / CMOS	4 lbs/1.8 kg	E-mount	3840x2160 (4096x2160 with 2015 firmware)	60	12-bit linear raw output with optional hardware	Two balanced 3-pin XLR inputs	4K XAVC Intra 4:2:2 10-bit at up to 600 Mbps, 4K XAVC Long-GOP 4:2:0 8-bit at up to 150 Mbps, ProRes HQ 422 with optional hardware upgrade	Sony X series XQD memory cards (dual configuration)
Sony FDR-AX100	1 in. / CMOS	1.75 lbs / 790g	12x Carl Zeiss lens	3840x2160	30	N	3.5mm stereo mini-jack	UHD 4K XAVC S	SDXC card (Class 10+)
Sony FDR-AX1	1/2.3-inch / CMOS	6 lbs 2 oz / 2.8 kg	20x Sony G lens	3840x2160	60	N	Two balanced 3-pin XLR inputs	UHD 4K XAVC S	XQD memory card
Sony a7S	35.8 x 23.9mm / 12.2Mpix / CMOS	1.1 lbs / 489g	E-mount	3840x2160	30	N	With optional hardware adapter	No 4K recording on board	–
Vision Research Phantom Flex4K	Super 35 (31.7mm diagonal) / 9.4Mpix / CMOS	13 lbs/ 5.9 kg	PL mount; Canon EOS; Nikon F/G	4096x2304	1000	12-bit linear/10-bit packed cine raw	Available early 2014; details TBA	AVI, H.264 MP4, Apple ProRes .mov,	Phantom CineMag IV

Information compiled November 2014

Light blue cells indicate cameras added since the previous version of this chart was published in November 2013.