

2019 CAMERA COMPARISON CHART - YEAR END UPDATE

GARY ADCKOCK & THOMAS FLETCHER	Imager (Actual Size)	ISO	Latitude Manufacturer Published Spec	Frame Rates	Pixel Resolution of Recorded Media	Recorded Bit Depth Format & Time (Highest Internal Record @ 24 fps)	Data (Per Min)	Weight (Body Only)	Power Draw	Highlighted Positives	Notable Credits	List Price Camera Only (US Dollars) Sorted by
	CMOS 44.7mm Ø 36.7 × 25.5mm	800 Base	14+ Stops	ARRIRAW LFOG LF16.9 LF2.39 .75-90 .75-90 .75-150 ProRes LFOG LF16.9 LF2.39 .75-60 .75-60 .75-100	ARRIRAW & ProRes LFOG - 4448x3096 LF16:9 - 3840x2160 LF2:39 - 4448x1856 ProRes Only LF16:9 2K 2048x1152 LF16:9 HD 1920x1080	12 Bit Log ARRIRAW: LFOG 2TB SXR CD: 64 min LF16:9 2TB SXR CD: 107 min LF2.39 2TB SXR CD: 108 min 12 bit Log C ProRes 4444: LFOG/2TB SXR CD: 64 min LF16:9/2TB SXR CD: 107 min LF2.39/2TB SXR CD: 108 min	ARRIRAW: LFOG 30 GB LF16:9 18.2 GB LF2.39 18.1 GB ProRes: LFOG 15.4 GB LF16:9 9.2 GB LF2.39 9.1 GB	17.2 lbs. 7.8 kg	135W RAW w/EVF & Wireless Video 85W RAW Body Only	Immersive large format aesthetic. ALEXA image: wide latitude, great skin tones, low noise Fast & efficient ProRes. Uncompressed & unencrypted ARRIRAW HDR recording & monitoring. 150 fps, built-in wireless video. Netflix approved	<i>Ford v Ferrari</i> <i>Dune</i> <i>Terminator:</i> <i>Dark Fate</i> <i>The Eternals</i> <i>The Undoing</i> <i>Killing Eve</i> <i>She's Gotta Have It</i>	\$98,200 (price includes other accessories such as EVF & Wireless System)
	CMOS 33.6mm Ø 28.3 × 18.2mm	800 Base	14+ Stops	ARRIRAW ProRes .75-120 .75-120 16:9 .75-96 .75-96 6:5 .75-96 .75-60 4:3 .75-90 .75 60 OG	OG 3424 x 2202 6:5 2578x 2160 4:3 2880 x 2160 16:9 3200 x 1800	12 Bit Log ARRIRAW OG 512GB XR CD - 29 min 4:3 512GB XR CD -36 min 16:9 512GB XR CD - 39 min OG 2TB SXR CD - 117 min 4:3 2TB SXR CD -142 min 16:9 2TB SXR CD - 157 min	ARAW P. Res 16.6 8.1 OG 13.8 6.7 4:3 12.5 6.2 16:9	14.3 lbs. 6.5 kg	125W RAW w/EVF & Wireless Vid 90W RAW Body Only	True Anamorphic 4:3 imager Wide latitude ideal for HDR Proven reliability & post efficiency ProRes as Log C, 709, With LUTs 3 independent MON OUTs I/O as BT.709, BT.2020, Arri Log C Optional built-in wireless video	<i>Game of Thrones</i> <i>Aladdin</i> <i>It 2</i> <i>Us</i> <i>John Wick 3</i> <i>Glass</i> <i>The Wandering Earth</i>	\$85,320 (price includes other accessories such as EVF & Wireless System)
	CMOS 46.3mm Ø 41.0 x 21.6mm	800 Base	17+ Stops w/ HDRx	1-60fps 7&8K 1-75fps 6K 1-96fps 5K 1-120fps 4K FPS increases when shooting 2.4:1	8K 8192 x 4320 7K 7168 x 3780 6K 6144 x 3240 5K 5120 x 2700 4K 4096 x 2160 2K 2048 x 1080	16 bit REDCODE 8KFF 5:1 512Mag -31 min 1TB SSD - 63 min (HDRx Cuts Time in Half)	8K FF 5:1 15.5 GB 6K FF 3:1 14.6 GB	7.5lbs 3.4kg Ranger 3.3 lbs. 1.5 kg DSMC	65W Body Only Ranger 60W Body Only DSMC	RANGER ergonomic unibody design, 24V pwr and fully integrated I/O ports DSMC2 version offers a more flexible, lightweight, fully modular form factor Lowest Data Rate for 8K recording Netflix Approved	<i>Army of the Dead</i> <i>Midway</i> <i>Ratched</i> <i>6 Underground</i> <i>The Laundromat</i> <i>Stranger Things S3</i> <i>Peaky Blinders S5</i>	\$79,500 Ranger \$54,500 DSMC2
	CMOS 44.7mm Ø 36.7 × 25.5mm	800 Base	14+ Stops	ARRIRAW LFOG LF16.9 .75-40 .75-60 ProRes LFOG LF16:9 LF2.39 .75-40 .75-60 .75-60	ARRIRAW & ProRes LFOG - 4448x3096 LF16:9 - 3840x2160 LF2:39 - 4448x1856 ProRes Only LF16:9 2K 2048x1152 LF16:9 HD 1920x1080	12 Bit Log ARRIRAW: LFOG 1TB Codex CD: 32 min LF16:9 1TB Codex CD: 53 min LF2.39 1TB Codex CD: 54 min 12 bit Log C ProRes 4444: LFOG/1TB Codex CD: 72 min LF16:9/1TB Codex CD: 121 min LF2.39/1TB Codex CD: 120 min	ARRIRAW: LFOG 29.8 GB LF16:9 17.9 GB LF2.39 17.9 GB ProRes: LFOG 13.2 GB LF16:9 7.9 GB LF2.39 8.0 GB	5.7 lbs. 2.6 kg	65W RAW w/EVF	Small & lightweight Immersive large format aesthetic ALEXA image: wide latitude, great skin tones, low noise Fast & efficient ProRes Uncompressed & unencrypted ARRIRAW HDR recording & monitoring Netflix approved	<i>1917</i> <i>Away</i> <i>Infinite</i> <i>The Eternals</i> <i>Aether</i> <i>The Mandalorian</i> <i>Ted Lasso</i>	\$58,760 Body Only
	CMOS 33.6mm Ø 28.3 × 18.2mm	800 Base	14+ Stops	OG - .75-30 ARRIRAW 16:9 .75-48 fps 4:3 ProRes .75-50 16:9 .75-200 6:5 ProRes.75-150 8:9 ProRes.75-150	OG 3424 x 2202 4:3 - 2880 x 2160 UHD 16:9 3840 x 2160 16:9 2048 x 1152 16:9 1920 x 1080	12 Bit Log ARRIRAW ProRes4444XQ UHD 512GB CFast - 38 min Records Classic ALEXA formats	ARRIRAW 16.6 GB ProRes 8.7 GB	5 lbs. 2.3 kg	45W Body Only 75W with Acc	Super Lightweight Carbon Body ALEXA Sensor Latitude and HDR image quality Integrated Lens Motor Control Motorized ND filters Exchangeable Lens Mounts Perfect for Gimbals & Multicopters	<i>Hobbs & Shaw</i> <i>John Wick 3</i> <i>Rocketman</i> <i>Spiderman:</i> <i>Far from Home</i> <i>This is Us</i>	\$45,720 Body Only
	CMOS 43.5mmØ 36.2 x 24.1mm	Dual 500 & 2500 Base	15+ Stops	6K 3:2 1.85 2.39 60 72 ¹ 90 ¹ 4K 4:3 17:9 2.39:1 75 110 120	FF 6048 x 4032 6K 17:9 6054 x 3192 4K 6:5 4096 x 3432 4K 4:3 4096 x 3024 4K 4096 x 2160 UHD 3840 x 2160 HD 1920 x 1080	16 Bit XOCN ST 6K 3:2 1TB AXS SSD - 69 Min	14 GB 6K 3:2 5 GB 4K 17:9	8.5 lbs. 3.9 kg	85W System 60W Body Only	6K Full Frame Sensor Dual Base ISO Operation PL Mount & Professional E-mount 8 Step Internal motorized Optical ND Filter System Sensor extension option - Rialto Netflix Approved	<i>Avatar Sequels</i> <i>Top Gun: Maverick</i> <i>Bad Boys for Life</i> <i>Dead to Me (S1)</i> <i>Snowfall (S3)</i> <i>Empire (S6)</i> <i>The Boys (S1)</i>	\$42,000 Body Only \$11,822 Rialto Extension Module
	CMOS 27.8mm Ø 24.6 x 12.9mm	Dual 800 & 5000 Base	14+ Stops	PURE & V35 1-120 fps VRAW & AVC-Intra 4K422 VARICAM LT AVC-Intra 4K422 1-30 & 1-60 (Ext)	4K 4096 x 2160 UHD 3840 x 2160 2K 2048 x 1080 HD 1920 x 1080	VARICAM LT AVC-I 422-4K, ProRes HD 512GB Express P2 Card 180 min -AVC-I 422-4K 124 min - ProRes HD	LT 4:2:2 2.3GB	12.2 lbs. V35 11.4 lbs. LT 6 lbs.	PURE 105W V35 99W LT 47W	Exceptional Low Light Performance Clean Signal @ 5000 ASA LT RAW via Atomos Shogun Inferno & Convergent Design Odyssey 7Q & 7Q+ Netflix Approved	<i>Crazy Rich Asians</i> <i>Deadliest Catch</i> <i>The Enemy Within</i> <i>Comedians in Cars</i> <i>Getting Coffee</i>	Pure \$48,000 V35 \$43,000 LT \$9,995

¹Future Update ²Select Shots

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	ARRI AMIRA	CMOS 27.2mm Ø 23.8 × 13.4mm	800 Base	14+ Stops	.75-60 fps - UHD .75-48fps - ARRIRAW .75-200fps - ProRes	3840 × 2160 3200 × 1800 2048 × 1152 1920 × 1080	12 Bit Log ARRIRAW 512GB CFast - 50 min ProRes 4:4:4 XQ UHD 512GB CFast - 38 min	2.8K RAW 10GB ProRes UHD 13.4GB	9.2 lbs. 4.1 kg	50W Body Only	ARRIRAW up 48fps w/ SUP and License Lightweight Comfortable Handheld 4K UHD & 3.2K Record Options Powerful In-Camera Color Grading 200 fps Slow Motion	Chicago PD NFL Films NBA Entertainment Sea of Shadows	\$35,000
	DSMC2 Body Shown	CMOS 33.8mm Ø 29.9 × 15.8mm	800 Base	16.5+ Stops	1-60fps 788K 1-75fps 6K 1-96fps 5K 1-120fps 4K FPS increased when shooting 2.4:1	8192 × 4320 7168 × 3780 6144 × 3240 5120 × 2700 4096 × 2160 2048 × 1080	16 Bit REDCODE - 8K FF @ 5:1 512GB SSD - 31 min 1TB SSD - 63 min (HDRx Cuts Time in Half)	8K FF 5:1 15.5 GB	7.5 Lbs. 3.4 Kg Ranger Body Only 3.3 lbs. 60W DSMC2 Body Only	65W Ranger Body Only 60W DSMC2 Body Only	RANGER ergonomic unibody design, 24V pwr and fully integrated I/O ports DSMC2 version offers a more flexible, lightweight, fully modular form factor Netflix Approved	The 2 Popes Russian Doll GLOW S3 Narcos: Mexico S2 Mindhunter	\$29,950 Ranger \$24,500 DSMC2
	RED HELIUM (Sensor) Ranger Body Shown	CMOS 35.6mm Ø 30.7 × 18mm	Dual 800 3200 Base	16.5+ Stops	1-75fps 5K 1-120fps 4K DCI 1-240fps 2K FPS increased when shooting 2.4:1	5120 × 2700 4096 × 2160 3072 × 1620 2048 × 1080	16 Bit REDCODE - 5K FF @ 2:1 512GB SSD - 44 min 1TB SSD - 87 min (HDRx Cuts Time in Half)	5K FF 2:1 15.1 GB	7.5 lbs. 3.4 Kg Ranger Body Only 3.3 lbs. 60W DSMC2 Body Only	65W Ranger Body Only 60W DSMC2 Body Only	RANGER ergonomic unibody design, 24V pwr and fully integrated I/O ports DSMC2 version offers a more flexible, lightweight, fully modular form factor Netflix Approved	Sneaky Pete S3 Jessica Jones S3 Seal Team S3 Rambo V: Last Blood	\$24,950 Ranger \$19,500 DSMC2
	Canon C500 Mark II	CMOS 43.1mm Ø 38.1 × 20.1mm	800 Base	15+ Stops	CRaw Lite 12bit 6K, 4K, UHD 24-60 XF-AVC 10bit 4K, UHD, 2K, 1080 24-60	5952x3140 (RO) 4096x2160 3840x2160 2048x1080 1920x1080	12bit -10bit CRawLite 5952x3140 (RO) 4096x2160 3840x2160 256GB CFast Express - 30 min	4K Raw 1GB	3.8 lbs. 1.77 kg	TBD	5.9K 12bit In camera raw Sensor level stabilization User interchangeable mount system 4K anamorphic support Expansion Modules Canon Autofocus Available	Too New for Credits	\$15,999 Body Only
	Sony PXW-FX9	CMOS 40.4mmØ 35.7 × 18.9mm	Dual 800 4000 Base	15+ Stops	XAVC-I 10bit 422 UHD 24-60 1080 24-120 MPEG HD422 1080 24-60	3840x2160 1920x1080	10 Bit 4:2:2 XAVC-I HD, UHD XQD 240GB = 101 min	4K XAVC 2.4GB	4.4 lbs. 2.0 kg	35W	Fast Hybrid AF & Face Recognition AF 4-128 Stop Electronic ND Sony SLog3 and S-Cinetone color Genlock, TC I/O USB 16 bit RAW output via extension unit ¹ Super 35 and LF Modes	Too New of for Credits	\$10,998
	Canon EOS C300 Mark II	CMOS 29.8mm Ø 26.4 × 13.8mm	800 Base	15 Stops	1-120 fps @ 2K/HD 1-30 fps @ 4K/UHD	4096 × 2160 3840 × 2160 2048 × 1080 1920 × 1080	12/10 Bit RGB XF-AVC-Intra 4:4:4 128GB CFast - 75 min 10 Bit YCC 4:2:2 XF-AVC Intra 128GB CFast - 40 min	2K 1.7 GB 4K 3.1 GB	4.4 lbs. 2.9 kg (PL Version)	21.2W	Canon Log 3 HDR Exposure Latitude Exceptional Sensitivity Canon RAW via external recorder 2, 4 & 6 Stop ND Filters Netflix Approved	Free Solo RBG Minding the Gap Hale Country Of Father and Sons	\$11,999
	Panasonic EVA-1	CMOS 29.8mm Ø 24.6 × 13mm	800 2500	14 Stops	1-30 @ 5.7K External RAW 1-60 @ 4K/UHD 1-240 @ 2K/HD	5720x3016 External RAW 4096 × 2160 3840 × 2160 2K 1080p 720p	All-I 400 MOV 10bit 4:2:2 128GB - 40 min HEVC H.265 4K 60P H.264/MP4/AVCHD	4K 3.2 GB	2.6 lbs. 1.2 kg	19W	Dual Native ISO 5.7K/4K/2K RAW out to ext. recorder V-Log/V-Gamut, HLG mode - Live HDR Affordable SD card media Netflix approved	Deadliest Catch LA's Finest The Enemy Within ² The Heights S2	\$6,495
	Blackmagic URSA Mini Pro G2	CMOS 29.1mm Ø 25.3 × 14.2mm	800 Base	15 Stops	Full Sensor 12-120fps 4.6K & 4K Windowed 12-150 4K DCI & 3K UHD & 2K 1-150fps 12-300fps 2K & HD	BRaw & ProRes 4.6K 4608 x 2592 4.6K 2.40 4608 x 1920 4K 16:9 4096 x 2304 4K DCI 4096 x 2160 UHD, 3K ANA. 2K & HD	12 bit (non-linear) Blackmagic RAW CFast 2.0 512 GB 4.6K BM RAW Q0 -30 min 4.6K RAW 3:1 - 56 min 4.6K ProRes XQ - 28 min	17.6 GB 4K BM RAW Q0 6.36 GB 4.6K ProRes	5 lbs. 2.3 kg	44W	Great skin tones Wide dynamic range for HDR Internal Blackmagic RAW or ProRes recording to CFast 2.0 or SD Cards Intl. ND Filters: 2, 4, 6 stops w/ IR cut Netflix Approved	Lucifer ² Let's Play 2 Pearl Jam The Resident ² Stand! Marvelous Mrs. Maisei ²	\$5,995
	35mm Film	CELLULOID 31.1mm Ø 24.9 × 18.1mm	500 Base	15-16 Stops	1-150 fps Arri 435 1-60 fps Sync Sound Body	6K 4K 2K Uncompressed (via Scanner)	16 Bit (Linear) 10 Bit (Log) 3P 14m48s 1000' 4P 11m06s 1000'	N/A	25 lbs. 11.3 kg 400' Load	55W ARRICAM	4:4:4 Color Sampling Established Workflow Widest Available Latitude Proven Archival Value Netflix Approved	The Irishman West Side Story Succession Staten Island Walking Dead 16mm	.77 ¢ per foot

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