Sony A7 II Full Specification

Convenience Features (details)

General	Camera type	Interchangeable-lens digital camera
	Lens mount	E-mount
Image sensor	Type	35 mm full frame (35.8 x 23.9 mm), Exmor CMOS sensor
	Number of pixels (effective)	Approx. 24.3 megapixels
	Number of pixels (total)	Approx. 24.7 megapixels
	Image sensor aspect ratio	3:2
	Anti-dust system	Charge protection coating on optical filter and image sensor shift mechanism
Recording system (still images)	Recording format	JPEG (DCF Ver. 2.0, Exif Ver. 2.3, MPF baseline compliant), RAW (Sony ARW 2.3 format)
	Image size (pixels)	[3:2 aspect ratio] 35 mm full frame L: 6000 x 4000 (24M), M: 3936 x 2624 (10M), S: 3008 x 2000 (6.0M) APS-C L: 3936 x 2624 (10M), M: 3008 x 2000 (6.0M), S: 1968 x 1312 (2.6M)
		[16:9 aspect ratio] 35 mm full frame L: 6000 x 3376 (20M), M: 3936 x 2216 (8.7M), S: 3008 x 1688 (5.1M) APS-C L: 3936 x 2216 (8.7M), M: 3008 x 1688 (5.1M), S: 1968 x 1112 (2.2M)
		[Sweep Panorama] Wide: Horizontal 12416 x 1856 (23M), vertical 5536 x 2160 (12M), Standard: Horizontal 8192 x 1856 (15M), vertical 3872 x 2160 (8.4M)

	Image quality modes	RAW, RAW & JPEG, JPEG Extra fine, JPEG Fine, JPEG Standard
	RAW output	14 bit
	Picture Effect	13 modes: Posterization (Colour, B/W), Pop Colour, Retro Photo, Partial Colour (R, G, B, Y), High Contrast Monochrome, Toy Camera, Soft High-key, Soft Focus, HDR Painting, Rich-tone Monochrome, Miniature, Watercolour, Illustration
	Creative Style	Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn Leaves, Black & White, Sepia (Contrast -3 to +3 steps, Saturation -3 to +3 steps, Sharpness -3 to +3 steps) (Style Box 1-6 also provided)
	Dynamic range functions	Off, Dynamic Range Optimiser (Auto/Level (1-5)), Auto High Dynamic Range: Auto Exposure Difference, Exposure Difference Level (1.0-6.0 EV, 1.0 EV step)
	Colour space	sRGB standard (with sYCC gamut) and Adobe RGB standard compatible with TRILUMINOS™ Colour
Recording system (movies)	Recording format	XAVC S / AVCHD format Ver. 2.0 compliant / MP4
	Video compression	XAVC S: MPEG-4 AVC/H.264 AVCHD: MPEG-4 AVC/H.264 MP4: MPEG-4 AVC/H.264
	Audio recording format	XAVC S: LPCM, 2ch AVCHD: Dolby Digital (AC-3), 2ch, Dolby Digital Stereo Creator MP4: MPEG-4 AAC-LC, 2ch
	Image size (pixels)	[1080 60i compatible device] XAVC S: 1920 x 1080 (60p/50Mbps, 30p/50Mbps, 24p/50Mbps) AVCHD: 1920 x 1080 (60p/28Mbps/PS, 60i/24Mbps/FX, 60i/17Mbps/FH, 24p/24Mbps/FX, 24p/17Mbps/FH) MP4: 1440 x 1080 (30fps/12Mbps), 640 x 480 (30fps/3Mbps)

		[1080 50i compatible device] XAVC S: 1920 x 1080 (50p/50Mbps, 25p/50Mbps) AVCHD: 1920 x 1080 (50p/28Mbps/PS, 50i/24Mbps/FX, 50i/17Mbps/FH, 25p/24Mbps/FX, 25p/17Mbps/FH) MP4: 1440 x 1080 (25fps/12Mbps), 640 x 480 (25fps/3Mbps)
	Picture profile	Yes (Off / PP1-PP7) Parameters: Black level, Gamma (Movie, Still, Cine1-4, ITU709, ITU709 [800%], S-Log2), Black Gamma, Knee, Colour Mode, Saturation, Colour Phase, Colour Depth, Detail, Copy, Reset
	Movie functions	Audio Level Display, Audio Rec Level, Auto Slow Shutter, HDMI info. Display (On/Off selectable), Time Code/User Bit, Picture Profile, Creative Style, Picture Effect, Rec Control, Dual Video Rec, Marker Setting
	Colour space	xvYCC standard (x.v.Colour when connected via HDMI cable) compatible with TRILUMINOS™ Colour
Clean HDMI output		1080 60i compatible device 1920 × 1080 (60p/24p) / 1920 × 1080 (60i), YCbCr 4:2:2 8bit / RGB 8bit
		1080 50i compatible device 1920 × 1080 (50p) / 1920 × 1080 (50i), YCbCr 4:2:2 8bit / RGB 8bit
Media	Media	Memory Stick PRO Duo, Memory Stick PRO-HG Duo, Memory Stick XC-HG Duo, SD memory card, SDHC memory card (UHS-I compliant), SDXC memory card (UHS-I compliant)
	Slot	Multi slot for Memory Stick Duo / SD Memory card
Noise reduction	Noise reduction	Long exposure NR: On/Off, available at shutter speeds longer than 1 sec., High ISO NR: Normal/Low/Off selectable
	Multi Frame NR	Auto/ISO 100 to 51200
White balance	Modes	Auto WB / Daylight / Shade / Cloudy / Incandescent / Fluorescent (Warm White / Cool White / Day White /

		Daylight) / Flash / Colour Temperature (2500 to 9900K) & Colour Filter (G7 to M7: 15 steps, A7 to B7: 15 steps) / Custom / Underwater
	AWB micro adjustment	G7 to M7 (15 steps), A7 to B7 (15 steps)
	Bracketing	3 frames, H/L selectable
Focus system	Type	Fast Hybrid AF (phase-detection AF / contrast-detection AF)
	Focus point	35 mm full frame: 117 points (phase-detection AF) APS-C: 99 points (phase-detection AF) / 25 points (contrast-detection AF)
	Sensitivity range	EV -1 to EV 20 (at ISO 100 equivalent with F2.0 lens attached)
	AF modes	Single-shot AF (AF-S), Continuous AF (AF-C), Direct Manual Focus (DMF), Manual Focus
	Focus area	Wide (117 points for phase-detection AF / 25 points for contrast-detection AF) / Centre / Flexible Spot (S/M/L) / Zone / Lock-on AF (Wide / Zone / Centre / Flexible spot (S/M/L))
	Other features	Lock-on AF, Eye AF, Predictive control, Focus lock; Eye-start AF and AF micro adjustment (both only available with optional LA-EA2 or LA-EA4 attached), AF illuminator (built-in, LED type, range: Approx. 0.30-3 m), AF ON
Exposure control	Metering type	1200-zone evaluative metering
	Metering sensor	Exmor CMOS sensor
	Metering sensitivity	EV -1 to EV 20 (at ISO 100 equivalent with F2.0 lens attached)
	Metering modes	Multi-segment, Centre-weighted, Spot
	Exposure modes	AUTO (iAUTO, Superior Auto), Programmed AE (P), Aperture priority (A), Shutter-speed priority (S), Manual

		(M), Scene Selection, Sweep Panorama, Movie
	Scene Selection	Portrait, Landscape, Macro, Sports Action, Sunset, Night Portrait, Night Scene, Handheld Twilight, Anti Motion Blur
	Exposure compensation	+/-5.0 EV (in 1/3 EV or 1/2 EV steps), with exposure compensation dial: +/-3.0 EV (in 1/3 EV steps)
	AE bracketing	Bracket: Cont./Bracket: Single, With 1/3 EV, 1/2 EV, 2/3 EV, 1.0 EV, 2.0 EV, 3.0 EV increments, 3/5 frames selectable
	AE lock	Available with AE lock button. Locked when shutter button is pressed halfway. Can be disabled from the Menu.
	ISO sensitivity (Recommended Exposure Index)	Still images: ISO 100-25600 (ISO numbers up from ISO 50 can be set as expanded ISO range), AUTO (ISO 100-6400, selectable lower limit and upper limit) Movies: ISO 200-25600 equivalent, AUTO (ISO 200-6400 selectable lower limit and upper limit)
Viewfinder	Type	XGA OLED, 1.3 cm (0.5 type) electronic viewfinder (colour)
	Total number of dots	2,359,296 dots
	Brightness control	Auto/Manual (5 steps between -2 and +2)
	Colour temperature control	Manual (5 steps)
	Field coverage	100%
	Magnification	Approx. 0.71x (with 50 mm lens at infinity, $-1\ \text{m}^{-1}$)
	Dioptre adjustment	-4.0 to $+3.0\ \text{m}^{-1}$
	Eye point	Approx. 27 mm from the eyepiece lens, 22 mm from the eyepiece frame at $-1\ \text{m}^{-1}$ (CIPA standard)
	Display	Graphic Display / Display All Info. / No Disp. Info. / Histogram / Digital Level Gauge

	Real-time image-adjustment display	On/Off
LCD screen	Type	7.5 cm (3.0 type) TFT drive
	Total number of dots	1,228,800 dots
	Brightness control	Manual (5 steps between -2 and +2), Sunny Weather mode
	Adjustable angle	Up approx. 107 degrees, down approx. 41 degrees
	Display selector (Finder/LCD)	Auto/Manual
	Display	Graphic Display / Display All Info. / No Disp. Info. / Histogram / Digital Level Gauge / Shooting information for viewfinder mode
	Real-time image-adjustment display	On/Off
	Focus magnifier	35 mm full frame: 5.9x, 11.7x APS-C: 3.8x, 7.7x
	Zebra	Yes
	Peaking MF	Yes (Level setting: High/Mid/Low/Off, Colour: White/Red/Yellow)
Other features	Face detection	On / On (Regist. Faces) / Off, Face registration, Face selection (Max. number of detectable faces: 8)
	Auto Object Framing	Yes
	Clear Image Zoom	Still / Movie: Approx. 2x
	Digital zoom	Smart zoom (still images) M: Approx. 1.5x, S: Approx. 2.0x Digital zoom (still images) Approx. 4x Digital zoom (movies) Approx. 4x
	PlayMemories Camera	Yes

	Apps	
	Lens compensation	Peripheral shading, chromatic aberration, distortion
Shutter	Type	Electronically controlled, vertical-traverse, focal-plane type
	Shutter speed	Still images: 1/8000 to 30 sec., Bulb Movies: 1/8000 to 1/4 (1/3 step) 1080 60i compatible device: Up to 1/60 in AUTO mode (up to 1/30 in Auto Slow Shutter mode) 1080 50i compatible device: Up to 1/50 in AUTO mode (up to 1/25 in Auto Slow Shutter mode)
	Flash sync. speed	1/250 sec.
	Electronic front curtain shutter	Yes, On/Off
SteadyShot INSIDE (image stabilisation)	Type	Image Sensor-Shift mechanism with 5-axis compensation (Compensation depends on lens specifications)
	Compensation effect	4.5 steps (Based on CIPA standard. Pitch/yaw shake only. With Sonnar T* FE 55 mm F1.8 ZA lens mounted. Long exposure NR off.)
Flash Control (with optional external flash)	Control	Pre-flash TTL
	Flash compensation	+/-3.0 EV (switchable between 1/3 and 1/2 EV steps)
	Flash bracketing	1/3, 1/2, 2/3, 1, 2, 3 EV steps, 3/5 frames selectable
	Flash modes	Flash off, Autoflash, Fill-flash, Rear Sync., Slow Sync., Red-eye reduction (On/Off selectable), Hi-speed sync[1], Wireless[1]
	External flash	Sony α System Flash compatible with Multi Interface Shoe. Attach the shoe adapter for flash compatible with Auto-lock Accessory Shoe.
	FE level lock	Yes

Drive	Drive modes	Single shooting, Continuous shooting (Hi/Lo selectable), Self-timer (10/2 sec. delay selectable), Self-timer (Cont.) (10 sec. delay; 3/5 exposures selectable), Bracketing (Cont., Single, White Balance, DRO)
	Speed (approx., max.)[*2]	Continuous shooting Hi: Max. 5fps, Continuous shooting Lo: Max. 2.5fps
	No. of recordable frames[*2] (approx.)	Continuous shooting Hi: 50 frames (JPEG Extra Fine L), 77 frames (JPEG Fine L), 80 frames (JPEG Standard L), 25 frames (RAW), 23 frames (RAW & JPEG) Continuous shooting Lo: 69 frames (JPEG Extra Fine L), 200 frames (JPEG Fine L), 200 frames (JPEG Standard L), 30 frames (RAW), 27 frames (RAW & JPEG)
Playback	Modes	Single (with or without shooting information, Y RGB histogram & highlight/shadow warning), 9/25-frame index view, Enlarged display mode (Maximum magnification L: 18.8x, M: 12.3x, S: 9.4x), Auto Review (10/5/2 sec, off), Image orientation (Auto/Manual/Off selectable), Slideshow, Panorama scrolling, Folder selection (Still / Date / MP4 / AVCHD / XAVC S), Forward/Rewind (Movie), Delete, Protect
Interface	PC interface	Mass-storage, MTP, PC remote
	Multi/Micro USB Terminal	Yes[*3]
	Wireless LAN (built-in)	Wi-Fi Compatible, IEEE802.11b/g/n (2.4GHz band)[*4] Playback of still images and movies on smartphones, PCs and TVs
	NFC™	Yes (NFC Forum Type 3 Tag compatible, One-touch remote, One-touch sharing)
	HD output	HDMI micro connector (Type-D), BRAVIA Sync (link menu), PhotoTV HD, 4K still image playback
	Multi Interface Shoe	Yes
	Others	Auto-lock Accessory Shoe compatible with supplied shoe adapter, Microphone terminal (3.5 mm Stereo

		minijack), Headphone terminal (3.5 mm Stereo minijack), Vertical Grip Connector
Audio	Microphone	Built-in stereo microphone or ECM-XYST1M / XLR-K2M (sold separately)
	Speaker	Built-in, monaural
Print	Compatible standards	Exif Print, Print Image Matching III, DPOF setting
Custom function	Type	Custom key settings, Programmable setting
	Memory function	Yes (2 sets)
Power	Battery	Rechargeable battery pack NP-FW50
	Still images	Approx. 270 shots (viewfinder) / approx. 350 shots (LCD screen) (CIPA standard)
	Movies	Actual[5][6]: Approx. 60 min with viewfinder, approx. 65 min with LCD screen (CIPA standard) Continuous[5][7]: Approx. 100 min with viewfinder, approx. 100 min with LCD screen (CIPA standard)
	External power	AC Adapter AC-PW20 (optional)
Operating temperature	Range	32°-104°F / 0-40°C

Specifications and features are subject to change without notice.

*1 With compatible external flash.

*2 Approximate. May vary depending on shooting conditions and media.

*3 Supports Micro USB compatible device.

*4 Configuration method/Access method: WPS or manually/infrastructure mode. When connecting to smartphones, the camera can always work as a base without a wireless access point. (Security: WEP/WPA-PSK/WPA2-PSK)

*5 Continuous movie recording is possible for approximately 29 minutes (limited by product specifications).

*6 Indicated recording time is defined by repeating the following cycle: Power on, start recording, zoom, stand-by and power off.

*7 Indicated recording time is defined by repeating the following cycle: Pressing the MOVIE button. No other operations such as zoom are performed.

See more - http://thenewcamera.com/tag/sony-a7-ii/