

Sony Alpha a7S II (ILCE-7SM2)

General	Camera type	Interchangeable-lens digital camera
	Lens mount	E-mount
Image sensor	Type	35 mm full frame (35.6 x 23.8 mm), Exmor CMOS sensor
	Number of pixels (effective)	Approx. 12.2 megapixels
	Number of pixels (total)	Approx. 12.4 megapixels
	Image sensor aspect ratio	03:02
	Anti-dust system	Charge protection coating on optical filter and image sensor shift mechanism
Recording format	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: 4240 x 2832 (12M), M: 2768 x 1848 (5.1M), S: 2128 x 1416 (3.0M) APS-C L: 2768 x 1848 (5.1M), M: 2128 x 1416 (3.0M), S: 1376 x 920 (1.3M) [16:9 aspect ratio] 35mm full frame L: 4240 x 2384 (10M), M: 2768 x 1560 (4.3M), S: 2128 x 1200 (2.6M) APS-C L: 2768 x 1560 (4.3M), M: 2128 x 1200 (2.6M), S: 1376 x 776 (1.1M) [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)

Recording system (still images)

Image quality modes RAW, RAW & JPEG, JPEG Extra fine, JPEG Fine, JPEG Standard

RAW output 14 bit

Uncompressed RAW Yes

Picture Effect 13 modes: Posterization (Color, B/W), Pop Color, Retro Photo, Partial Color (R, G, B, Y), High Contrast Monochrome, Toy Camera, Soft High-key, Soft Focus, HDR Painting, Rich-tone Monochrome, Miniature, Watercolor, 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 Optimizer (Auto/Level (1-5)), Auto High Dynamic Range: Auto Exposure Difference, Exposure Difference Level (1.0-6.0 EV, 1.0 EV step)

Color space sRGB standard (with sYCC gamut) and Adobe RGB standard compatible with TRILUMINOS™ Color

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

Recording system (movies)

Image size (pixels)	<p>[NTSC] XAVC S 4K: 3840 x 2160 (30p/100Mbps, 30p/60Mbps, 24p/100Mbps, 24p/60Mbps) XAVC S HD: 1920 x 1080 (60p/50Mbps, 30p/50Mbps, 24p/50Mbps, 120p/100Mbps, 120p/60Mbps) AVCHD: 1920 x 1080 (60p/28Mbps/PS, 60i/24Mbps/FX, 60i/17Mbps/FH, 24p/24Mbps/FX, 24p/17Mbps/FH)</p> <p>MP4: 1920 x 1080 (60p/28Mbps, 30p/16Mbps), 1280 x 720 (30p/6Mbps)</p> <p>[PAL] XAVC S 4K: 3840 x 2160 (25p/100Mbps, 25p/60Mbps) XAVC S HD: 1920 x 1080 (50p/50Mbps, 25p/50Mbps, 100p/100Mbps, 100p/60Mbps) AVCHD: 1920 x 1080 (50p/28Mbps/PS, 50i/24Mbps/FX, 50i/17Mbps/FH, 25p/24Mbps/FX, 25p/17Mbps/FH)</p> <p>MP4: 1920 x 1080 (50p/28Mbps, 25p/16Mbps), 1280 x 720 (25p/6Mbps)</p>
High Frame Rate Recording	<p>[NTSC] 1920 x 1080 (24p/12Mbps, 30p/16Mbps) [PAL] 1920 x 1080 (25p/16Mbps)</p>
Picture Profile	<p>Yes (Off / PP1-PP9) Parameters: Black level, Gamma (Movie, Still, Cine1-4, ITU709, ITU709 [800%], S-Log2, S-Log3), Black Gamma, Knee, Color Mode (Movie, Still, Cinema, Pro, ITU709 Matrix, White&Black, S-Gamut, S-Gamut3.Cine, S-Gamut3), Saturation, Color Phase, Color Depth, Detail, Copy, Reset</p>
Movie functions	<p>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, PAL/NTSC Selector, Gamma Display Assist</p>
Color space	<p>xvYCC standard (x.v.Color when connected via HDMI cable) compatible with TRILUMINOS™ Color</p>

Clean HDMI output

[NTSC] 3840 x 2160 (30p/24p) / 1920 x 1080 (60p/24p) / 1920 x 1080 (60i),
YCbCr 4:2:2 8bit/ RGB 8bit

[PAL] 3840 x 2160 (25p) / 1920 x 1080 (50p) / 1920 x 1080 (50i), YCbCr 4:2:2
8bit/ RGB 8bit

Media

Media

Memory Stick PRO Duo, Memory Stick PRO-HG Duo, Memory Stick Micro (M2), SD memory card, SDHC memory card (UHS-I compliant), SDXC memory card (UHS-I compliant), microSD memory card, microSDHC memory card, microSDXC memory card

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 409600

White balance

Modes

Auto WB/Daylight/Shade/Cloudy/Incandescent/Fluorescent (Warm White/Cool White/Day White/Daylight)/Flash/Color Temperature (2500 to 9900K) & Color Filter (G7 to M7: 57 steps, A7 to B7: 29 steps)/Custom/Underwater

AWB micro adjustment

G7 to M7 (57 steps), A7 to B7 (29 steps)

Bracketing

3 frames, H/L selectable

Type

Contrast-detection AF

Focus point

169 points (contrast-detection AF)

Sensitivity range

EV -4 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 system

Focus area

Wide (169 points for contrast-detection AF) / Center / Flexible Spot (S/M/L)
/ Zone / Expand Flexible Spot / Lock-on AF (Wide / Zone / Center / Flexible
Spot (S/M/L) / Expand Flexible Spot)

Other features	Lock-on AF, Eye AF, 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. 0.30-3m), AF ON
Metering type	1200-zone evaluative metering
Metering sensor	Exmor CMOS sensor
Metering sensitivity	EV -3 to EV 20 (at ISO 100 equivalent with F2.0 lens attached)
Metering modes	Multi-segment, Center-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 / High Frame Rate (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M))
Scene Selection	Portrait, Landscape, Macro, Sports Action, Sunset, Night Portrait, Night Scene, Hand-held Twilight, Anti Motion Blur
Exposure control	Exposure compensation
AE bracketing	+/-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 lock	Bracket: Single/Bracket: Cont., 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0 or 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3 or 1.0 EV increments.
ISO sensitivity (Recommended Exposure Index)	Available with AE lock button. Locked when shutter button is pressed halfway. Can be disabled from the Menu.
Type	Still images: ISO 100-102400 (expandable to ISO 50-409600), AUTO (ISO 100-12800, selectable lower limit and upper limit), Movies: ISO 100-102400 equivalent (expandable to ISO 100-409600), AUTO (ISO 100-12800 equivalent, selectable lower limit and upper limit)
Total number of dots	XGA OLED, 1.3 cm (0.5 type) electronic viewfinder (color)
Brightness control	2,359,296 dots
	Auto/Manual (5 steps between -2 and +2)

Viewfinder	Color temperature control	Manual (5 steps)
	Field coverage	100%
	Magnification	Approx. 0.78x (with 50 mm lens at infinity, -1 m^{-1})
	Diopter adjustment	-4.0 to $+3.0 \text{ m}^{-1}$
	Eye point	Approx. 23mm from the eyepiece lens, 18.5mm from the eyepiece frame at -1 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: 4.2x, 8.3x, APS-C: 2.7x, 5.4x
	Zebra	Yes (selectable level + range or lower limit as custom setting)
	Peaking MF	Yes (Level setting: High/Mid/Low/Off, Color: White/Red/Yellow)
	Other features	Face detection
Auto Object Framing		Yes
Clear Image Zoom		[Still Image/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 Apps	Yes
	Lens compensation	Peripheral shading, chromatic aberration, distortion
	Zoom Ring Rotate	Yes
Shutter	Type	Electronically controlled, vertical-traverse, focal-plane type
		Still images: 1/8000 to 30 sec., Bulb Movies: 1/8000 to 1/4 (1/3 step)
	Shutter speed	NTSC: Up to 1/60 in AUTO mode (up to 1/30 in Auto Slow Shutter mode) PAL: 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
	Silent Shooting	Yes, On/Off
SteadyShot INSIDE (image stabilization)	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 stops)
	Flash bracketing	3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, 1.0 EV increments.
	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 a System Flash compatible with Multi Interface Shoe. Attach the shoe adaptor for flash compatible with Auto-lock Accessory Shoe.
FE level lock	Yes
Drive modes	Single shooting, Continuous shooting, Speed Priority Continuous shooting, Self-timer, Self-timer (Cont.), Bracketing (Cont., Single, White Balance, DRO)
Self-timer	10 sec. delay/5 sec. delay/2 sec. delay/Continuous self-timer (3 frames after 10 sec. delay/5 frames after 10 sec. delay/3 frames after 5 sec. delay/5 frames after 5 sec. delay/3 frames after 2 sec. delay/5 frames after 2 sec. delay)/Bracketing self-timer (Off/2 sec. delay/5 sec. delay/10 sec. delay)
Drive	Speed (approx., max.)* ² Speed Priority Continuous shooting: Max. 5fps, Continuous shooting: Max. 2.5fps
No. of recordable frames* ² (approx.)	Speed Priority Continuous shooting: 64 frames (JPEG Extra Fine L), 200 frames (JPEG Fine L), 200 frames (JPEG Standard L), 31 frames (RAW), 26 frames (RAW & JPEG), 24 frames (RAW (Uncompressed)), 24 frames (RAW (Uncompressed) & JPEG) Continuous shooting: 100 frames (JPEG Extra Fine L), 200 frames (JPEG Fine L), 200 frames (JPEG Standard L), 59 frames (RAW), 34 frames (RAW & JPEG), 29 frames (RAW (Uncompressed)), 28 frames (RAW (Uncompressed) & 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: 13.3x, M: 8.7x, S: 6.7x), Auto Review (10/5/2 sec, off), Image orientation (Auto/Manual/Off selectable), Slideshow, Panorama scrolling, Folder selection (Still / Date / MP4 / AVCHD / XAVC S HD / XAVC S 4K), Forward/Rewind (Movie), Delete, Protect
	PC interface	Mass-storage, MTP, PC remote
Interface	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 movie output, 4K still image playback
	Multi Interface Shoe	Yes
	Others	Auto-lock Accessory Shoe compatible with supplied shoe adaptor, 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
	Type	Custom key settings, Programmable setting
Custom function	Memory function	Yes (2 sets)
	Battery	Rechargeable battery pack NP-FW50

Power	Still images	Approx. 310 shots (viewfinder) / Approx. 370 shots (LCD screen) (CIPA standard)
	Movies	Actual ^{*5*6} : Approx. 55 min. (viewfinder) / Approx. 60 min. (LCD screen) (CIPA standard)
		Continuous ^{*5*7} : Approx. 95 min. (viewfinder) / Approx. 95 min. (LCD screen) (CIPA standard)
External power	AC Adaptor 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.