ILCE7M5/B

Alpha 7 V - Full-frame Mirrorless Interchangeable Lens Camera

The α7V offers everything needed to achieve amazing imaging results. With 33MP resolution, a partially stacked sensor, AI-based subject recognition AF, high-speed continuous shooting, advanced video performance and intuitive operation, the α7V offers breakthrough image quality and speed.

Bullets

- Full-frame partially stacked Exmor RS™ CMOS sensor with approximately 33.0 effective megapixels
- Newly developed BIONZ XR2™ image processing engine with built-in AI
- Excellent image quality
- Deep learning based light source estimation for accurate white balance
- Composite RAW support
- Extended RAW Processing offers refined RAW development
- 5-axis IBIS for up to 7.5-step central and 6.5-step peripheral[14] stabilization
- New lightweight RAW format
- Creative Look creates visual moods in-camera
- Real-time Recognition AF:[18] Human pose estimation technology
- Real-time Recognition AF:[19] A wider range of recognized subjects
- Reliable Real-time Tracking[22]
- High-density 759-point[23] focal plane phase-detection AF
- Flexible focus area settings
- Precise AF in low light
- Blackout-free continuous shooting at up to 30 fps[24] with full AF/AE tracking
- Pre-Capture captures moments prior to shutter release[25]
- One-button Continuous Shooting Speed Boost temporarily boosts speed while shooting bursts[27]
- 7K oversampled 4K 60p recording with full pixel readout and no pixel binning[28]
- High frame rate 4K recording at up to 120p[29]
- High-performance digital audio interface
- In-camera audio noise reduction
- Active Mode stabilization supports handheld shooting at 4K 120p[35]
- Extreme stabilization with Dynamic active Mode[38]
- Auto Framing[40] automatically adjusts composition
- S-Log3 supports post-production workflows
- Automatic creation of still images from Shot Marks
- Original 4-axis monitor maximizes shooting flexibility
- Info display adapts to horizontal and vertical orientation
- 3.68 million dot Quad-VGA OLED electronic viewfinder
- Improved grip design
- Two USB Type-C® ports
- CFexpress Type A memory card support
- Dust and moisture resistant design[48]
- Durable magnesium alloy chassis
- Effective heat dissipation
- Excellent power efficiency
- Advanced Wi-Fi for wireless transfers and remote tethering
- Easy live streaming
- Creators' App
- Monitor & Control
- Recycled materials in Cameras and Digital Camera Products
- Recyclable non-plastic packaging materials
- Greater accessibility for all users

Features

Full-frame partially stacked Exmor RS™ CMOS sensor with approximately 33 .0 effective megapixels

A partially stacked Exmor RS™ CMOS image sensor features high-speed circuitry above and below the sensing layer. Sensor readout is approx. 4.5 x[1] faster than the α7 IV, maximum shutter speed is 1/16000 s,[2] blackout-free bursts at up to 30 fps are available with AF/AE tracking,[3] and video can be recorded at 4K 120p.[4] This advanced sensor contributes up to an unprecedented 16 stops of dynamic range[5] with smooth gradations.

Newly developed BIONZ XR2™ image processing engine with built-in AI

The new BIONZ XR2 processing engine delivers dramatic improvements in image and sound quality, communication, integration, and operation. It also incorporates AI-based Real-time Recognition AF and[6] Real-time Tracking,[7] plus accurate, stable color reproduction. A lightweight RAW format has been included, while user interface, networking, and file management functions have been refined for smooth workflow.

Excellent image quality

The new 33.0-megapixel[8] sensor and BIONZ XR2 processing engine work together to deliver up to 16 stops of dynamic range.[9] Lifelike gradations from shadows to highlights enable highly effective HDR processing when needed, and effective noise reduction applied at all sensitivities achieves high resolution throughout the ISO 100-51200 still and movie range (expandable to 50-204800 for stills and 100-102400 for movies).

Deep learning based light source estimation for accurate white balance

Auto white balance (AWB) performance has been improved by the adoption of deep learning technology for light source color estimation. More accurate, stable white balance is achieved in scenes that can be challenging only with conventional AWB systems, such as those that include a mix of skin tones, vegetation, shade, and more.

Composite RAW support

Composite RAW shooting automatically captures multiple RAW images that can then be composited[10] using a computer. [NR Shooting] and [Shooting for HDR] settings are provided. [NR Shooting] produces low-noise images while maintaining high resolution even at mid to high sensitivities. [Shooting for HDR] captures high dynamic range.[11] 4, 8, or 16 images are captured at 30 fps[12] to allow handheld shooting.

Extended RAW Processing offers refined RAW development

The Imaging Edge Desktop[13] application now includes a new Extended RAW Processing feature that takes full advantage of the large amount of information in RAW image files for enhanced RAW development, particularly with moving subjects. Two processing modes are provided: [Extended NR] for extremely low noise while maintaining full resolution, and [Extended Hi-Res] for 4x the normal pixel count and reduced noise.

5-axis IBIS for up to 7.5-step central and 6.5-step peripheral[14] stabilization

An advanced optical stabilization unit, gyro sensors, and algorithm accurately detect and correct image shake. Up to 7.5-step central and 6.5-step peripheral stabilization[14] allows handheld shooting without having to boost sensitivity. The body also works with compatible lenses[15] for even better stabilization. Even shake that is amplified at telephoto focal lengths is effectively suppressed.

New lightweight RAW format

A new lightweight RAW format achieves high image quality in smaller files that are easier to manage. The new [Compressed (HQ)] format is provided in addition to the existing [Lossless Compressed] format, providing even greater compression in lightweight RAW files that allow extended continuous shooting while prioritizing image quality.

Creative Look creates visual moods in-camera

The Creative Look function makes it easy to create visual moods in-camera.[12] presets are provided, including [FL2] and [FL3] selections. The presets can be used as-is or edited to create custom looks. Adjustments can be made using 7 parameters[16] including contrast, saturation, highlight, shadow, and more while viewing the results on the monitor display.[17] Custom looks can be saved for later use.

Real-time Recognition AF:[18] Human pose estimation technology

AI processing in the new BIONZ XR2 processing engine improves recognition by approximately 30% over the α7 IV. Human pose estimation technology uses detailed form and pose data to achieve reliable human eye recognition as well as accurate recognition of body and head position, even with challenging subjects. Multiple subjects can also be recognized, making it possible to track the desired subject.

Real-time Recognition AF:[19] A wider range of recognized subjects

Real-time Recognition AF supports [Human], [Animal], [Bird], [Insect], [Car/Train] and [Airplane] recognition,[20] and an [Auto] mode can automatically select the subject type.[20] Animal recognition has been improved by about 30%,[21] and now recognizes the eyes of some grazing and small animals in addition to the eyes, heads, and faces of dogs, cats, and similar. Bird recognition has been improved by about 50%.[21]

Reliable Real-time Tracking[22]

AI-based Real-time Tracking[22] accurately focuses on and tracks the selected subject while the shutter button is half-pressed. If the subject cannot be recognized or subject recognition AF is OFF, Sony's original algorithm will process color, pattern, and spatial data at high speed for reliable focus and tracking. If [Touch Tracking] is engaged, touching a subject on the monitor will instantly select it for tracking.

High-density 759-point[23] focal plane phase-detection AF

759[23] phase detection points in a high-density focal plane phase-detection AF system cover approximately 94% of the image area for precise focusing. The large amount of data from the image sensor is processed in real time by the new processing engine to ensure ideal focus in situations that can normally be challenging, such as small subjects or people in a night scene where focus often falls on the background.

Flexible focus area settings

The XS size can make focusing easier when foreground objects such as branches are in the way, for example. It is also possible to create a custom focus area of specified size and even vertical aspect ratio to optimize focusing for a wide variety of subjects and scenes. Shape and size can be set via the touch-sensitive monitor.

Precise AF in low light

The latest AF algorithms achieve high AF precision down to light levels as low as EV-4.0 in AF-S mode (ISO 100 equivalent, F2.0 lens) so that AF is precise and reliable even in low light.

Blackout-free continuous shooting at up to 30 fps[24] with full AF/AE tracking

High-speed bursts at up to 30 fps[24] with uncompromised AF/AE tracking are now possible when using the electronic shutter, and there is no viewfinder blackout when shooting stills. 60 AF/AE calculations per second ensure that fleeting moments can be captured with confidence, even when shooting fast, unpredictable action or portraits where expressions can change in an instant.

Pre-Capture captures moments prior to shutter release[25]

This feature "retroactively" captures moments that occurred before the shutter was released. After half-pressing the shutter button to set focus, full-pressing the shutter captures a series of images starting from up to 1 second[26] before the shutter button was initially half-pressed at all framerates up to 30fps.

One-button Continuous Shooting Speed Boost temporarily boosts speed while shooting bursts[27]

This assignable function makes it possible to change continuous shooting speed at any time while shooting a continuous burst. Instantly switch from a "normal" burst rate to a higher rate when the decisive moment approaches, for example. Continuous Shooting Speed Boost is most useful when the timing of the desired moment can be roughly predicted. It is now possible to use this feature even while shooting single frames.

7K oversampled 4K 60p recording with full pixel readout and no pixel binning[28]

The new BIONZ XR2 processor and Exmor RS sensor enable full pixel readout with no pixel binning when recording full frame, allowing 3.3x the data required for 4K (QFHD: 3840 x 2160) to be compressed into spectacularly detailed 4K 60p[28] images with minimal moiré and jaggies.

High frame rate 4K recording at up to 120p[29]

Internal 4K recording at up to 120p[29] makes it possible to produce up to 5x slow motion video with revealing 4K resolution.[30] Frame rates up to 240 fps[31] are available when recording at Full HD resolution, allowing up to 10x slow motion playback (24p recording) for detailed sports analysis and more. A variety of formats are supported, including 4:2:2 10-bit recording, Long-GOP, and All-Intra.

High-performance digital audio interface

The camera's Multi Interface (MI) Shoe™ features a built-in digital audio interface that allows connection to Sony's ECM-W3 Wireless Microphone or ECM-M1 Shotgun Microphone for direct digital input and recording with top-quality sound.

In-camera audio noise reduction

An Audio Noise Reduction function that digitally reduces continuous noise is included. Audio Noise Reduction works with the

camera's built-in microphone and external microphones[32] to dramatically reduce wind noise and other continuous environmental noise, including mechanical noise from a power zoom lens.[33] [Wind NR] and generic [Noise Cut] settings are available.[34]

Active Mode stabilization supports handheld shooting at 4K 120p[35]

Active Mode optical image stabilization[36] is particularly effective for handheld movie shooting and now supports 4K 120p recording.[35] Active Mode uses the camera's stabilization unit, gyro sensors, and image stabilization algorithms to precisely detect and correct for camera movement. Stabilization is even more effective when the body is used with a compatible stabilized lens.[37]

Extreme stabilization with Dynamic active Mode[38]

The Dynamic active Mode adds electronic stabilization to the optical stabilization system for even greater effect. Dynamic active Mode stabilization is approximately 30% more effective than Active Mode stabilization,[39] making it possible to shoot smooth, stable images even when running around with the camera.

Auto Framing[40] automatically adjusts composition

Auto Framing[40] uses AI-based subject recognition to automatically keep the subject in a prominent position when shooting movies, even when the camera is stationary. To fully convey the user's intent, it is possible to control the timing at which Auto Framing will begin, the size of the subject in the frame, and the tracking speed. Auto Framing can be ideal for interviews, music performance, cooking, and much more.

S-Log3 supports post-production workflows

The S-Log3 gamma curve helps to maintain smooth, natural gradations from shadows to mid-gray (18% gray), making it easier to grade for high image quality in post-production. S-Gamut3 and S-Gamut3. Cine color spaces are supported. Imported user LUTs (.cube)[41] can be registered and used as alternatives to the preset picture profiles (PPLUT 1 through 4) to provide the final graded output.[42]

Automatic creation of still images from Shot Marks

If this function is set up before shooting, frames marked with Shot Marks during movie recording are automatically extracted and saved as stills when recording has finished. It is also possible to extract and save any other frames as stills after recording.

Original 4-axis monitor maximizes shooting flexibility

Sony's 4-axis multi-angle monitor swings upward by 98°, downward by 40°, and sideways by 180°. When open it rotates up to 270º.[43] The 3.2 type 2.1 million dot (3:2 aspect ratio) display panel is touch sensitive, has a wide color gamut,[44] and provides clear viewing in bright outdoor conditions. A [Monitor Low Bright] mode reduces monitor brightness and battery drain when the camera has not been used for a preset time.

Info display adapts to horizontal and vertical orientation

Shooting info shown on the monitor and in the electronic viewfinder automatically adapts to horizontal and vertical camera orientation for maximum legibility and shooting comfort.

3.68 million dot Quad-VGA OLED electronic viewfinder

A 3.68 million-dot (approx.) Quad-VGA OLED electronic viewfinder delivers clear viewing. Brightness and color temperature are adjustable for optimum viewing in any situation. The finder frame rate can be set to [Standard] (60 fps), or [High] (120 fps).

Improved grip design

The α7V has been refined for improved hold and manageability to minimize fatigue, particularly when using heavy telephoto lenses or shooting for long periods of time. The grip fits comfortably in the palm of the hand while the location and angle of the shutter button have been carefully designed for effortless access.

Two USB Type-C® ports

Two USB Type-C ports are provided, both supporting USB Power Delivery (PD)[45] so that a compatible charger or mobile battery can be connected to supply power or charge the internal battery.[46] PORT 1 supports SuperSpeed USB 10 Gbps (USB 3.2) for high-speed backups and PC remote connection. PORT 2 supports Hi-Speed USB 480 Mbps (USB 2.0) for USB communication.

CFexpress Type A memory card support

Card slot 1 (upper slot) supports CFexpress Type A memory cards[47] in addition to SDXC/SDHC UHS-II/UHS-I memory cards, allowing high-speed recording of large volumes of image data.

Dust and moisture resistant design[48]

Refinements throughout the body achieve outstanding dust and moisture resistance. External seams and the battery cover feature

a sealed structure that effectively prevents intrusion of dust and moisture, maximizing reliability even in challenging outdoor conditions.[48]

Durable magnesium alloy chassis

A lightweight, high-rigidity magnesium alloy is used for the top cover, front cover, internal frame, and rear cover. The grip and front cover are manufactured as a single unit for high rigidity, while the mount is attached by six screws for extra strength. High strength and rigidity provide maximum durability in applications where large, heavy lenses are often used.

Effective heat dissipation

Effective heat dissipation allows 4K 60p 4:2:0 8bit video to be recorded continuously for approximately 90 minutes.[49] A unique Σ (sigma) shaped graphite component built into the image stabilization unit allows the image sensor, a major source of heat inside the camera body, to move freely during image stabilization while effectively conducting heat away for extremely efficient heat dissipation.

Excellent power efficiency

The low power consumption of the new BIONZ XR2 image processing engine notably improves overall stamina. The α7V can shoot approximately 630 still images per charge when using the viewfinder, or approximately 750 still images per charge when using the LCD monitor (CIPA standard).

Advanced Wi-Fi for wireless transfers and remote tethering

Built-in Wi-Fi (IEEE 802.11ax) with 2x2 MIMO support provides high-speed wireless communication that is significantly improved over the α7 IV. Communication on the 5 GHz and 6 GHz[50] bands offers maximum speed and stability with minimum interference for news and sports shooters who need to deliver immediately via FTP, as well as for studio environments.

Easy live streaming

In addition to live streaming at up to 4K 30p via a direct USB (UVC/UAC) computer connection, live streaming is also possible via a wired or wireless LAN network.[51] When streaming via LAN, it is possible to broadcast 4K (3840 x 2160) 30p[52] video while simultaneously recording the same content to an internal memory card. RTMP, RTMPS, and SRT protocols are supported.

Creators' App

The Creators' App supports efficient data management, camera updates, and other important workflow processes from a mobile device.
Cloud upload
Image data can be uploaded to Creators' Cloud storage directly from the camera or via a smartphone (Wi-Fi or wired).
Remote control
A smartphone can be used to remotely control shooting functions and to monitor battery status.
Camera function support
Update the camera to the latest software version and import LUT files (.cube) from the Creators' Cloud to the camera. Access to the "Discover" service also makes it possible to share content with creators around the world.

Monitor & Control

The Monitor & Control app makes camera settings, monitoring, and operation all remotely available from a smartphone or tablet[59] connected to the camera. Use a familiar mobile device for pro-level movie production.

Recycled materials in Cameras and Digital Camera Products

Sony's Road to Zero environmental plan[53] aims to achieve a zero environmental footprint by 2050. We use a fully recyclable, durable, high-quality SORPLAS™ material as much as possible to reduces stress on the environment without compromising performance or functionality. More than 20%[54] of this product is made of recyclable plastic.[55] Additionally, Sony Group manufacturing facilities run on 100% renewable energy.

Recyclable non-plastic packaging materials

Sony is working towards the use of non-plastic packaging materials[56] that provide ample protection against shock and impact. The α7V is shipped in a plastic-free package made of an "Original Blended Material" that can be recycled as paper[57]. Plant-based non-woven fabrics are used for product bags, further reducing the use of plastics, and minimizing environmental stress.

Greater accessibility for all users

Accessibility features such as a screen reader[58] that reads most menu screen text aloud, a menu magnifier, a [Mode Dial Control Set] function, and others make it easier for everyone to enjoy shooting with the α7V. Other advanced features like AI-based Real-time Recognition AF, intuitive touch operation for subject tracking, and many more make the joys of photography and moviemaking available to a wider range of users.

Specification

General	
CAMERA TYPE	Interchangeable lens digital camera
LENS MOUNT	E-mount
Camera Section	
TYPE	35mm full frame (35.9 x 23.9 mm), Exmor RS CMOS sensor
NUMBER OF PIXELS (TOTAL)	Approx. 35.7 megapixels
NUMBER OF PIXELS (EFFECTIVE)	Still images: Approx. 33.0 megapixels max.*, Movies: Approx. 27.6 megapixels max.* *Number of effective pixels varies depending on attached lenses and camera settings.
OPTICAL LOW PASS FILTER	Yes
COLOR TEMPERATURE RANGE	2500 K - 9900 K
ANTI-DUST SYSTEM	Yes
Recording system (still image)	
RECORDING FORMAT	JPEG (DCF Ver. 2.0, Exif Ver. 2.32, MPF Baseline compliant), HEIF (MPEG-A MIAF compliant), RAW (Sony ARW 6.0 format compliant)
IMAGE SIZE (PIXELS) [3:2]	35mm full frame L: 7008 x 4672 (33 M), M: 4608 x 3072 (14 M), S: 3504 x 2336 (8.2 M)
Image Quality Modes	RAW JPEG HEIF (4:2:0 / 4:2:2) RAW & JPEG RAW & HEIF
RAW Output	Yes
Recording system (movie)	
VIDEO COMPRESSION	XAVC S: MPEG-4 AVC/H.264, XAVC HS: MPEG-H HEVC/H.265
AUDIO RECORDING FORMAT	LPCM 2ch (48 kHz 16 bit), LPCM 2ch (48 kHz 24 bit), LPCM 4ch (48 kHz 24 bit) *When using accessories that support 4ch output / 24 bits with the Multi Interface Shoe.
Movie recording format	
MOVIE RECORDING FORMAT (XAVC HS 4K)	3840 x 2160 (4:2:0, 10bit) (Approx.):119.88p (200 Mbps), 3840 x 2160 (4:2:0, 10bit) (Approx.):100p (200 Mbps), 3840 x 2160 (4:2:0, 10bit) (Approx.):59.94p (150 Mbps / 75 Mbps / 45 Mbps), 3840 x 2160 (4:2:0, 10bit) (Approx.):50p (150 Mbps / 75 Mbps / 45 Mbps), 3840 x 2160 (4:2:0, 10bit) (Approx.):23.98p (100 Mbps / 50 Mbps / 30 Mbps), 3840 x 2160 (4:2:2, 10bit) (Approx.):119.88p (280 Mbps), 3840 x 2160 (4:2:2, 10bit) (Approx.):100p (280 Mbps), 3840 x 2160 (4:2:2, 10bit) (Approx.):59.94p (200 Mbps / 100 Mbps), 3840 x 2160 (4:2:2, 10bit) (Approx.):50p (200 Mbps / 100 Mbps), 3840 x 2160 (4:2:2, 10bit) (Approx.):23.98p (100 Mbps / 50 Mbps)
MOVIE RECORDING FORMAT (XAVC S 4K)	3840 x 2160 (4:2:0, 8bit) (Approx.):119.88p (200 Mbps),3840 x 2160 (4:2:0, 8bit) (Approx.):100p (200 Mbps),3840 x 2160 (4:2:0, 8bit) (Approx.):59.94p (150 Mbps),3840 x 2160 (4:2:0, 8bit) (Approx.):50p (150 Mbps),3840 x 2160 (4:2:0, 8bit) (Approx.):29.97p (100 Mbps / 60 Mbps),3840 x 2160 (4:2:0, 8bit) (Approx.):25p (100 Mbps / 60 Mbps),3840 x 2160 (4:2:0, 8bit) (Approx.):23.98p (100 Mbps / 60 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):119.88p (280 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):100p (280 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):59.94p (200 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):50p (200 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):29.97p (140 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):25p (140 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):23.98p (100 Mbps)
MOVIE RECORDING FORMAT	1920 x 1080 (4:2:0, 8bit) (Approx.):119.88p (100 Mbps / 60 Mbps),1920 x 1080 (4:2:0, 8bit) (Approx.):100p (100 Mbps / 60 Mbps),1920 x 1080 (4:2:0, 8bit) (Approx.):59.94p (50 Mbps / 25 Mbps),1920 x 1080 (4:2:0, 8bit) (Approx.):50p (50 Mbps / 25 Mbps),1920 x 1080 (4:2:0, 8bit) (Approx.):29.97p (50 Mbps / 16 Mbps),1920 x 1080 (4:2:0, 8bit)

(XAVC S HD)	(Approx.):25p (50 Mbps / 16 Mbps),1920 x 1080 (4:2:0, 8bit) (Approx.):23.98p (50 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):59.94p (50 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):50p (50 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):29.97p (50 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):25p (50 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):23.98p (50 Mbps)
MOVIE RECORDING FORMAT (XAVC S-I 4K)	3840 x 2160 (4:2:2, 10bit) (Approx.):59.94p (600 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):50p (500 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):29.97p (300 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):25p (250 Mbps),3840 x 2160 (4:2:2, 10bit) (Approx.):23.98p (240 Mbps)
MOVIE RECORDING FORMAT (XAVC S-I HD)	1920 x 1080 (4:2:2, 10bit) (Approx.):59.94p (222 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):50p (185 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):29.97p (111 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):25p (93 Mbps),1920 x 1080 (4:2:2, 10bit) (Approx.):23.98p (89 Mbps)
Movie Function	
SLOW & QUICK MOTION (SHOOTING FRAME RATE)	Yes
PROXY RECORDING	Yes
TC / UB	Yes
Recording system	
MEMORY CARD SLOT	SLOT1: Multi slot for SD (UHS-I/II compliant) memory card / CFexpress 2 Type A card, SLOT2: Slot for SD (UHS-I/II compliant) memory card
Focus System	
TYPE	Fast Hybrid AF (phase-detection AF / contrast-detection AF)
FOCUS POINT	Still images: Max. 759 points (phase-detection AF), Movies: Max. 759 points (phase-detection AF)
FOCUS SENSITIVITY RANGE	EV-4 to EV20 (ISO100 equivalent with F2.0 lens attached in AF-S)
RECOGNITION TARGET (STILL IMAGES)	Auto,Human,Animal,Bird,Insect,Car,Train,Airplane
RECOGNITION TARGET (MOVIES)	Auto,Human,Animal,Bird,Insect,Car,Train,Airplane
OTHER FEATURES	AF Level for Crossing (Still), AF Track for Speed Change (Still), AF Subj. Shift Sensitivity (Movie), AF Transition Speed (Movie), Switch V/H AF Area,AF Area Regist., Circ. of Focus Point,Focus Map (Movie), AF Assist (Movie)
AF ILLUMINATOR	Yes (with Built-in LED type)
Exposure Control	
METERING TYPE	1200-zone evaluative metering
METERING SENSITIVITY	EV-3 to EV20 (ISO100 equivalent with F2.0 lens attached)
EXPOSURE COMPENSATION	+/- 5.0 EV (1/3 EV, 1/2 EV steps selectable)
ISO SENSITIVITY	Still images: ISO 100 - 51200 (expandable to ISO 50 - 204800), AUTO (ISO 100 - 12800, selectable lower limit and upper limit), Movies: ISO 100 - 51200 equivalent* (expandable to ISO 100 - 102400), AUTO (ISO 100 - 12800, selectable lower limit and upper limit) *When [SteadyShot] is set to [Active] , [Standard] or [Off]. ISO 100 - 25600 equivalent when [SteadyShot] is set to [Dynamic active].
ANTI-FLICKER SHOOT	Yes *Anti-flicker Shooting is not available when the [Shutter Type] setting is set to [Electronic Shutter].
Viewfinder	
TYPE	1.3 cm (0.5-type) electronic viewfinder (Quad-VGA OLED)
NUMBER OF DOTS	3 686 400 dots

MAGNIFICATION	Approx. 0.78x (with 50 mm lens at infinity, -1 m^{-1})
Diopter adjustment	-4.0 to +3.0 m^{-1}
EYE POINT	Approx. 23 mm from the eyepiece lens, 18.5 mm from the eyepiece frame at -1 m^{-1} (CIPA standard)
FINDER FRAME RATE SELECTION	STD 60fps / HI 120fps
LCD Screen	
TYPE	8.0 cm (3.2-type) type TFT
TOUCH PANEL	Yes
NUMBER OF DOTS	2 095 104 dots
ADJUSTABLE ANGLE	Opening Angles (approx.): Up 98°, down 40°, side 180°, rotation 270°
Other Features	
OTHER FEATURES	Soft Skin Effect,Creative Look,Custom function,Picture Profile,Time-lapse,Auto Framing,Pre-Capture,Continuous Shooting Speed Boost,NR Shooting,HDR Shooting,Framing Stabilizer,Vertical Display
Clear Image Zoom	
CLEAR IMAGE ZOOM (STILL IMAGES)	Approx. 2x
CLEAR IMAGE ZOOM (MOVIES)	Approx. 1.5x (4K), Approx. 2x (HD)
Shutter	
SHUTTER TYPE	Mechanical shutter / Electronic shutter
SHUTTER SPEED	Still images (Electronic shutter): 1/16000 to 30 s,Still images (Mechanical shutter): 1/8000 to 30 s, Bulb,Movies: 1/8000 to 1 s
FLASH SYNC. SPEED	1/250 s (35mm full frame), 1/320 s (APS-C) *With compatible Sony external flash
ELECTRONIC FRONT CURTAIN SHUTTER	Yes (ON/OFF)
Image Stabilization	
TYPE	Image sensor-shift mechanism with 5-axis compensation (compensation depends on lens specifications)
COMPENSATION EFFECT	Center 7.5 stops and Periphery 6.5 stops (based on CIPA2024 standard. Pitch/Yaw/Roll compensation. With FE 50mm F1.2 GM lens mounted. Long exposure NR off.)
MODE	Still images: On / Off, Movie: Dynamic active / Active / Standard / Off
Flash	
CONTROL	Pre-flash TTL *A flash cannot be used when [Shutter Type] is set to [Electronic Shutter].
FLASH COMPENSATION	+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)
EXTERNAL FLASH COMPATIBILITY	Sony α System Flash compatible with Multi Interface Shoe, attach the shoe adaptor for flash compatible with Auto-lock accessory shoe
Drive	
CONTINUOUS DRIVE SPEED (APPROX. MAX.)	Electronic Shutter: Hi+: 30 fps[7], Mechanical Shutter: Hi+: 10 fps *Varies according to shooting conditions or memory card used
NO. OF FRAME RECORDABLE (APPROX.)	JPEG Fine L: 185 frames, RAW: 95 frames, RAW & JPEG: 85 frames, RAW (Compressed (HQ)): 35 frames, RAW (Compressed (HQ)) & JPEG: 35 frames, RAW (Lossless Compressed): 35 frames, RAW (Lossless Compressed) & JPEG: 35 frames

	*Varies according to shooting conditions or memory card used
Playback	
MODES	Enlarged display mode,Protect,Rating,Shot Mark (Movie), Divider Frame,Crop,Photo Capture
Accessibility	
FUNCTIONS	Screen Reader,Mode Dial Control Set,Focus Magnifier,Focus Map (Movie),Peaking Display,Subject Recognition in AF,Touch Focus,Touch Tracking,Touch Shutter,Touch AE,Multi-angle LCD screen,Custom function,Enlarge Menu Screen
Interface	
PC INTERFACE	Mass-storage / MTP
USB TYPE-C TERMINAL	Yes (PORT1: SuperSpeed USB 10 Gbps (USB 3.2) compatible, PORT2: Hi-Speed USB 480 Mbps (USB 2.0) compatible)
WIRELESS LAN BUILT-IN	Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac/ax (2.4 GHz band/5 GHz band/6 GHz band)) *Models sold in some countries/regions support IEEE 802.11b/g/n/ax (2.4GHz) wireless LAN only or 802.11a/b/g/n/ac/ax (2.4GHz/5GHz) wireless LAN only.
BLUETOOTH	Yes (Bluetooth Standard Ver. 5.3 (2.4 GHz band))
HDMI OUTPUT	HDMI connector (Type-A),3840 x 2160 (59.94p / 50p / 29.97p / 25p / 23.98p) / 1920 x 1080 (59.94p / 50p / 23.98p) / 1920 x 1080 (59.94i / 50i), YCbCr 4:2:2 10bit / RGB 8bit
MULTI INTERFACE SHOE	Yes (with Digital Audio Interface) *Sony accessories for the Accessory Shoe can be attached.
MIC TERMINAL	Yes (3.5 mm Stereo minijack)
HEADPHONE TERMINAL	Yes (3.5 mm Stereo minijack)
REMOTE CONTROL (WIRELESS)	Yes (Bluetooth remote control)
FUNCTIONS	FTP Transfer Func. (Wired LAN (USB-LAN), USB Tethering, Wi-Fi), Send to smartphone,Remote control via smartphone,Remote Shooting
USB Streaming	
VIDEO DATA FORMAT	MPEG-4 AVC/H.264, MPEG-H HEVC/H.265* *When [Protocol] is set to [RTMP/RTMPS], [MPEG-4 AVC/H.264] is only available.
VIDEO RESOLUTION	3840 x 2160 (15p / 30p),3840 x 2160 (12.5p / 25p),1920 x 1080 (30p / 60p),1920 x 1080 (25p / 50p),1280 x 720 (30p),1280 x 720 (25p)
AUDIO DATA FORMAT	LPCM 2ch (16bit 48 kHz)
Audio	
MICROPHONE	Built-in, stereo
SPEAKER	Built-in, monaural
Lens compensation	
Setting	Shading, Chromatic Aberration, Distortion, Breathing (Movie)
Power	
SUPPLIED BATTERY	One rechargeable battery pack NP-FZ100
BATTERY LIFE (STILL IMAGES)	Approx. 630 shots (Viewfinder) / Approx. 750 shots (LCD monitor) (CIPA standard) *The LCD screen is turned on, shot once every 30 seconds, flash strobe once every two times, turn power off and on once every ten times.

BATTERY LIFE (MOVIE, ACTUAL RECORDING)	Approx. 130 min (Viewfinder) / Approx. 135 min (LCD monitor) (CIPA standard) *Indication recording time, which is defined by repeating the cycle: Power on, start recording, zoom , stand-by and power off.
BATTERY LIFE (MOVIE, CONTINUOUS RECORDING)	Approx. 210 min (Viewfinder) / Approx. 210 min (LCD monitor) (CIPA standard)
INTERNAL BATTERY CHARGE	Yes (Available with USB Type-C terminal. USB Power Delivery compatible) *Requires USB PD (18W min.) power supply and cable (3A min.) if charging the battery pack while it is inserted into the camera.
USB POWER SUPPLY	Yes (Available with USB Type-C terminal. USB Power Delivery compatible)
Power consumption	
Power consumption with Viewfinder	Still images: Approx. 3.1 W (with FE 28-70mm F3.5-5.6 OSS lens attached), Movies: Approx. 4.7 W (with FE 28-70mm F3.5-5.6 OSS lens attached)
Power consumption with LCD screen	Still images: Approx. 2.6 W (with FE 28-70mm F3.5-5.6 OSS lens attached), Movies: Approx. 4.7 W (with FE 28-70mm F3.5-5.6 OSS lens attached)
Weight	
WEIGHT (WITH BATTERY AND MEMORY CARD INCLUDED)	Approx. 695 g / Approx. 1 lb 8.6 oz
BODY ONLY	Approx. 610 g /Approx. 1 lb 5.6 oz
Dimensions	
DIMENSIONS (W X H X D)	Approx. 130.3 x 96.4 x 82.4 mm, Approx. 130.3 x 96.4 x 72.3 mm (from grip to monitor)/Approx. 5 1/4 x 3 7/8 x 3 1/4 inches, Approx. 5 1/4 x 3 7/8 x 2 7/8 inches (from grip to monitor)
Operating Temperature	
OPERATING TEMPERATURE	0 - 40°C / 32 - 104°F
Supplied Accessory	
WHAT'S IN THE BOX	Rechargeable Battery NP-FZ100, Shoulder strap, Body cap, Accessory shoe cap, Eyepiece cup, Lens hood, Lens cap, Lens rear cap
Network Streaming	
Video data format	MPEG-4 AVC/H.264 MPEG-H HEVC/H.265 *When [Protocol] is set to [RTMP/RTMPS], [MPEG-4 AVC/H.264] is only available.
Video resolution	3840 x 2160 (30p) 3840 x 2160 (25p) 2560 x 1440 (30p) 2560 x 1440 (25p) 1920 x 1080 (30p / 60p) 1920 x 1080 (25p / 50p) 1280 x 720 (30p / 60p) 1280 x 720 (25p / 50p)
Audio data format	AAC-LC 2ch (16bit 48 kHz)
Protocol	RTMP RTMPS SRT

1. Compared to the image sensor on α7 IV. Sony tests.
2. When using the electronic shutter.
3. When using the electronic shutter. [Hi+] continuous shooting mode. A software update may be required for some lenses. See Sony's support web page for information on compatible lenses.
4. QFHD (3840 x 2160). 4K 120p recording is only available in the APS-C/Super 35mm mode. Reduced angle of view.
5. Sony tests. Still images. Mechanical shutter.
6. Available subject settings are: AUTO, Human, Animal/Bird, Animal, Bird, Insect, Car/Train, and Airplane. Subject types other than the type specified may be

erroneously recognized in some cases.
7. [Tracking] in the menu.
8. Approximate, effective.
9. Sony tests. Still images. Mechanical shutter.
10. The latest version of the Imaging Edge Desktop applications is required for compositing. The lowest shutter speed allowable for the [NR Shooting] mode is 1/30 s. The flash mode is fixed at Off, and some functions are not available.
11. Depending on the shooting settings, it may not be possible to shoot with the level of dynamic range specified in [D-Range] in the menu.
12. Sony tests. Capture speed may be slower in some situations. Capture speed may vary depending on the lens used when using the AF-C focus mode. Refer to Sony's support website for lens compatibility information.
13. The latest version of the Imaging Edge Desktop applications is required for Extended RAW Processing.
14. CIPA 2024 standards. Pitch/Yaw/Roll compensation shake only. FE 50mm F1.2 GM lens. Long exposure NR off.
15. See Sony's support web page https://www.sony.net/dics/fnc1002/ for information on compatible lenses. A software update may be required for some lenses. Stabilization may vary according to the lens used.
16. Up to 8 parameters including Sharpness Range when shooting stills.
17. Not including Sharpness Range and Clarity
18. Available subject settings are: AUTO, Human, Animal/Bird, Animal, Bird, Insect, Car/Train, and Airplane. Subject types other than the type specified may be erroneously recognized in some cases.
19. Available subject settings are: AUTO, Human, Animal/Bird, Animal, Bird, Insect, Car/Train, and Airplane. Subject types other than the type specified may be erroneously recognized in some cases.
20. When AUTO is selected the camera will normally recognize the subject type automatically, but the wrong type may be selected in some situations. In such cases manually selecting the intended subject type may solve the problem.
21. Compared to the α7 IV, Sony tests.
22. [Tracking] in the menu.
23. For still images. The number of points varies according to the shooting mode.
24. When using the electronic shutter. [Hi+] continuous shooting mode. A software update may be required for some lenses. See Sony's support web page for information on compatible lenses.
25. When using the electronic shutter. High continuous shooting speeds can cause an increase in camera temperature. Pre-Capture may be limited to protect the device in high ambient temperature conditions.
26. Maximum Pre-Capture time may be reduced in some situations.
27. When using the electronic shutter. When Continuous Shooting Speed Boost is used during continuous shooting separate pre-boost and post-boost playback groups are created.
28. When [4K angle of view Priority] is ON. Some noise may be visible when recording in low light with [4K angle of view Priority] turned ON. Angle of view is reduced when [4K angle of view Priority] is OFF while recording full-frame 4K 60p.
29. QFHD (3840 x 2160) recording. 4K 120p is recorded in APS-C/Super 35mm mode. Reduced angle of view.
30. Post-production editing and S&Q mode recording are required. Audio is not recorded in S&Q mode.
31. Full HD (1920 x 1080) recording in S&Q mode. Full HD 240 fps is recorded in APS-C/Super 35mm mode.
32. Compatible external microphones that connect via a 3.5mm mic terminal or directly via the MI shoe.
33. Power zoom noise reduction applies only to the internal microphone.
34. When using the wind noise reduction or noise-cutting function, the sound quality may differ from normal audio.
35. [APS-C S35 Shooting] is fixed [ON] when shooting 4K 120p video or using the S&Q feature at 240 fps.
36. Angle of view is reduced in Active Mode.
37. Refer to Sony's support website https://www.sony.net/dics/fnc1002/ for information on compatible lenses. A software update may be required for some lenses.
38. Angle of view is reduced more than in Active Mode. Clear Image Zoom is not available when using Dynamic active Mode. Maximum ISO sensitivity is ISO25600.
39. Sony tests.
40. Only available for movies. Framing is cropped from 4K images, resulting in reduced angle of view.
41. 17-point or 33-point CUBE files (.cube).
42. PPLUT 1–4 are only available for movie recording.
43. Cables connected to the camera's connectors may limit monitor movement. Do not apply excessive force when opening or rotating the monitor.
44. DCI-P3 equivalent.
45. USB PD compatible power supply and USB cable not included. A USB PD compatible power supply that can deliver more than 18 W (9V/2A output) and a USB-C to USB-C cable that can handle more than 3 A are recommended.
46. A battery must be installed in the camera when supplying USB power. Operation is not guaranteed with all USB PD devices. The internal battery may drain even while USB power is supplied.
47. CFexpress 4 standard not supported. CFexpress 4 memory cards will function according to CFexpress 2 standard. CFexpress Type B cards not supported.
48. Not guaranteed to be 100% dust and moisture proof.
49. Sony internal tests with the camera at 25° at record start, monitor panel open, and full battery. Time may vary depending on environmental and shooting conditions.
50. 5 GHz/6 GHz communication may be restricted in some countries and regions.
51. A commercially available USB-LAN adaptor is required. Proper operation of all USB-LAN adaptors is not guaranteed.
52. Output video size is APS-C/Super 35mm.
53. For Sony's Environmental activities, refer to https://www.sony.co.jp/en/corporate/sustainability/environment/
54. Multiplying total recycled, biomass plastic weight and recycled ratio of the plastic.
55. Sony survey. Recyclable plastic used in the product.
56. Not including materials used in coatings and adhesives.
57. This product packaging is recyclable in communities that have appropriate recycling programs.
58. Availability varies depending on region and language.
59. See the Monitor & Control Help Guide for information on compatible operating systems.