

Recording (still images)

14bit RAW

Yes

Color Space

sRGB standard (with sYCC gamut), Adobe RGB standard and Rec. ITU-R BT.2100 standard (BT.2020 gamut).

Creative Look

ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)

Creative Style

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Dynamic Range Functions

Off, Dynamic Range Optimizer

Image Quality Modes

RAW (Compressed / Lossless Compressed / Uncompressed), JPEG (Extra fine / Fine / Standard / Light), HEIF (4:2:0 / 4:2:2) (Extra fine / Fine / Standard / Light)

IMAGE SIZE (PIXELS) [1:1]

35 mm full frame L: 5760 x 5760 (33M), M: 3744 x 3744 (14M), S: 2880 x 2880 (8.2M), APS-C M: 3744 x 3744 (14M), S: 2880 x 2880 (8.2M)

IMAGE SIZE (PIXELS) [4:3]

35 mm full frame L: 7680 x 5760 (44.2M), M: 4992 x 3744 (18.6M), S: 3840 x 2880 (11M), APS-C M: 4992 x 3744 (18.6M), S: 3840 x 2880 (11M)

Image Size (pixels) [16:9]

35 mm full frame L: 8760 x 4864 (42M), M: 5616 x 3160 (17.7M), S: 4320 x 2432 (10.5M), APS-C M: 5616 x 3160 (17.7M), S: 4320 x 2432 (10.5M)

Image Size (pixels) [3:2]

35 mm full frame L: 8640 x 5760 (49.7M), M: 5616 x 3744 (21M), S: 4320 x 2880 (12.4M), APS-C M: 5616 x 3744 (21M), S: 4320 x 2880 (12.4M)

Picture Effect

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Picture Profile

Yes (Off / PP1-PP11) Parameters: Black level, Gamma (Movie, Still, S-Cinetone, Cine1-4, ITU709, ITU709 (800%), S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset

Recording Format

JPEG (DCF Ver. 2.0, Exif Ver. 2.32, MPF Baseline compliant), HEIF (MPEG-A MIAF compliant), RAW (Sony ARW 4.0 format compliant)

Exposure

AE Lock

Locked when shutter button is pressed halfway. Available with AE lock button. (On/Off/Auto)

Anti-Flicker Shoot.

Yes

Exposure Bracketing

Bracket: Cont., Bracket: Single, 3/5/9 frames selectable. (Ambient light, Flash light)

Exposure Compensation

+/- 5.0EV (1/3 EV, 1/2 EV steps selectable) (with exposure compensation dial: +/- 3EV [1/3 EV steps])

EXPOSURE MODES

AUTO(iAuto), Programmed AE (P), Aperture priority (A), Shutter-speed priority (S), Manual (M), Movie (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M) / Flexible Exp. Mode), Slow & Quick Motion (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M) / Flexible Exp. Mode)

ISO Sensitivity (Recommended Exposure Index)

Still images: ISO 100–32000 (ISO numbers up from ISO 50 to ISO 102400 can be set as expanded ISO range.), AUTO (ISO 100–12800, selectable lower limit and upper limit), Movies: ISO 100–32000 equivalent, AUTO (ISO 100–12800, selectable lower limit and upper limit)

Metering Mode

Multi-segment, Center-weighted, Spot, Spot Standard/Large, Entire Screen Avg., Highlight

METERING SENSITIVITY

EV -3 to EV 20 (at ISO100 equivalent with F2.0 lens attached)

Metering Sensor

Exmor RS CMOS sensor

Metering Type

1200-zone evaluative metering

Scene Selection

-

Focus

AF illuminator

Yes (with built-in LED type)

AF Illuminator range

Approx. 0.98 ft – approx. 0.98 ft (with FE 28-70 mm F3.5–5.6 OSS lens attached)

EYE AF

Still images: Human (Right/Left Eye Select) / Animal (Right/Left Eye Select) / Bird, Movie: Human (Right/Left Eye Select)

Focus Area

Wide / Zone / Center / Flexible Spot / Expanded Flexible Spot / Tracking

Focus Mode

AF-S (Single-shot AF), AF-C (Continuous AF), DMF (Direct Manual Focus), Manual Focus

FOCUS POINT

35 mm full frame: 759 points (phase-detection AF), APS-C mode with FF lens: 759 points (phase-detection AF), with APS-C lens: 575 points (phase-detection AF) / 425 points (contrast-detection AF)

Focus Sensitivity Range

EV-4 to EV20 (ISO 100 equivalent with F2.0 lens attached)

Focus Sensor

Exmor RS CMOS sensor

Focus Type

Fast Hybrid AF (phase-detection AF / contrast-detection AF)

Focus type with LA-EA3 (Sold separately)

Phase-detection

Other Features

Predictive control, Focus lock, AF Track Sens. (Still), AF Subj. Shift Sensitivity (Movie), AF Transition Speed (Movie), Switch V/H AF Area, AF Area Regist., Circ. of Focus Point

LCD Screen

Adjustable Angle

Up by Approx. 107 degrees, Down by Approx. 41 degrees

Brightness Control

Manual (5 steps between -2 and +2), Sunny Weather mode

Focus Magnifier

Yes, Focus Magnifier (35 mm full frame: 4.2x / 8.5x, APS-C: 2.7x / 5.5x)

Monitor Type

2.95 inch (3.0-type) wide type TFT

Number of Dots

1,440,000 dots

Touch Panel

Yes

Image Sensor

Anti-Dust System

Yes (Charge protection coating on Optical Filter and ultrasonic vibration mechanism)

Aspect Ratio

3 : 2

Number of Pixels (Effective)

Approx. 50.1 megapixels

Number of Pixels (total)

Approx. 50.5 megapixels

Sensor Type

35-mm full frame (35.9 x 24.0 mm), Exmor RS CMOS sensor

Recording (movie)

Audio Recording Format

LPCM 2ch(48 kHz 16bit), LPCM 2ch(48 kHz 24bit), LPCM 4ch(48 kHz 24bit), MPEG-4 AAC-LC 2ch

Color Space

Rec. ITU-R BT.2100 standard compatible (BT.2020 gamut)

Creative Look

ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)

Creative Style

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MOVIE RECORDING SYSTEM (XAVC HS 4K)

3840 x 2160 (4:2:0, 10 bit, NTSC) (Approx.): 120p (200 Mbps), 60p (150 Mbps / 75 Mbps / 45 Mbps), 24p (100 Mbps / 50 Mbps / 30 Mbps); 3840 x 2160 (4:2:0, 10 bit, PAL) (Approx.): 100p (200 Mbps), 50p (150 Mbps / 75 Mbps / 45 Mbps); 3840 x 2160 (4:2:2, 10 bit, NTSC) (Approx.): 120p (280 Mbps), 60p (200 Mbps / 100 Mbps), 24p (100 Mbps / 50 Mbps); 3840 x 2160 (4:2:2, 10 bit, PAL) (Approx.): 100p (280 Mbps), 50p (200 Mbps / 100 Mbps)

MOVIE RECORDING SYSTEM (XAVC HS 8K)

7680 x 4320 (4:2:0, 10bit, NTSC) (Approx.): 30p (400 Mbps / 200 Mbps), 24p (400 Mbps / 200 Mbps); 7680 x 4320 (4:2:0, 10bit, PAL) (Approx.): 25p (400 Mbps / 200 Mbps)

MOVIE RECORDING SYSTEM (XAVC S 4K)

3840 x 2160 (4:2:0, 8 bit, NTSC) (Approx.): 120p (200 Mbps), 60p (150 Mbps), 30p (100 Mbps / 60 Mbps), 24p (100 Mbps / 60 Mbps); 3840 x 2160 (4:2:0, 8 bit, PAL) (Approx.): 100p (200 Mbps), 50p (150 Mbps), 25p (100 Mbps / 60 Mbps); 3840 x 2160 (4:2:2, 10 bit, NTSC) (Approx.): 120p (280 Mbps), 60p (200 Mbps), 30p (140 Mbps), 24p (100 Mbps); 3840 x 2160 (4:2:2, 10 bit, PAL) (Approx.): 100p (280 Mbps), 50p (200 Mbps), 25p (140 Mbps)

MOVIE RECORDING SYSTEM (XAVC S HD)

1920 x 1080 (4:2:0, 8 bit, NTSC) (Approx.): 120p (100 Mbps / 60 Mbps), 60p (50 Mbps / 25 Mbps), 30p (50 Mbps / 16 Mbps), 24p (50 Mbps); 1920 x 1080 (4:2:0, 8 bit, PAL) (Approx.): 100p (100 Mbps / 60 Mbps), 50p (50 Mbps / 25 Mbps), 25p (50 Mbps / 16 Mbps); 1920 x 1080 (4:2:2, 10 bit, NTSC) (Approx.): 60p (50 Mbps), 30p (50 Mbps), 24p (50 Mbps); 1920 x 1080 (4:2:2, 10 bit, PAL) (Approx.): 50p (50 Mbps), 25p (50 Mbps)

MOVIE RECORDING SYSTEM (XAVC S-I 4K)

3840 x 2160 (4:2:2, 10 bit, NTSC) (Approx.): 60p (600 Mbps), 30p (300 Mbps), 24p (240 Mbps); 3840 x 2160 (4:2:2, 10 bit, PAL) (Approx.): 50p (500 Mbps), 25p (250 Mbps)

MOVIE RECORDING SYSTEM (XAVC S-I HD)

1920 x 1080 (4:2:2, 10 bit, NTSC) (Approx.): 60p (222 Mbps), 30p (111 Mbps), 24p (89 Mbps); 1920 x 1080 (4:2:2, 10 bit, PAL) (Approx.): 50p (185 Mbps), 25p (93 Mbps)

Movie Functions

Audio Level Display, Audio Rec Level, PAL/NTSC Selector, Proxy Recording (1280 x 720 [6 Mbps], 1920 x 1080 [9 Mbps], 1920 x 1080 [16 Mbps]), TC/UB, Auto Slow Shutter, Gamma Disp. Assist, RAW Output(HDMI)

Picture Effect

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Picture Profile

Yes (Off / PP1-PP11) Parameters: Black level, Gamma (Movie, Still, S-Cinetone, Cine1-4, ITU709, ITU709 (800%), S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset

Recording Format

XAVC S, XAVC HS

Slow & quick motion (shooting frame rate)

NTSC mode: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps, 240fps, PAL mode: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps, 200fps

Video Compression

XAVC S: MPEG-4 AVC/H.264, XAVC HS: MPEG-H HEVC/H.265

Power

Battery Life (Movie, actual recording)

Approx. 90 min. (Viewfinder) / Approx. 95 min. (LCD monitor) (CIPA standard)

Battery Life (Movie, continuous recording)

Approx. 145 min. (Viewfinder) / Approx. 150 min. (LCD monitor) (CIPA standard)

Battery Life (Still Images)

Approx. 430 shots (Viewfinder) / approx. 530 shots (LCD monitor) (CIPA standard)

Internal Battery Charge

Yes (Available with USB Type-C Terminal. USB Power Delivery-compatible)

Power consumption with LCD screen

Still images: approx. 3.7 W (with FE 28–70 mm F3.5–5.6 OSS lens attached), Movies: approx. 6.6 W (with FE 28–70 mm F3.5–5.6 OSS lens attached)

Power consumption with Viewfinder

Still images: approx. 4.6 W (with FE 28–70 mm F3.5–5.6 OSS lens attached), Movies: approx. 6.8 W (with FE 28–70 mm F3.5–5.6 OSS lens attached)

Supplied Battery

One rechargeable battery pack NP-FZ100

USB Power Supply

Yes (Available with USB Type-C Terminal. USB Power Delivery-compatible)

Interface

Bluetooth®

Yes (Bluetooth Standard Ver. 5.0 [2.4 GHz band])

Functions

FTP Transfer Func. (Wired LAN, USB Tethering, Wi-Fi)., View on Smartphone, Remote control via Smartphone, One-touch NFC remote, PC Remote, BRAVIA Sync (Control for HDMI), PhotoTV HD

Headphone Terminal

Yes (3.5 mm Stereo minijack)

LAN Terminal

Yes (1000BASE-T, 100BASE-TX, 10BASE-T)

Mic Terminal

Yes (3.5 mm Stereo minijack)

Multi Interface Shoe

Yes (with Digital Audio Interface)

Multi/Micro USB terminal

Yes (SuperSpeed USB 10 Gbps (USB 3.2) compatible)

PC Interface

Mass-storage / MTP

Sync terminal

Yes

Vertical Grip Connector

Yes

Wireless LAN (Built-In)

Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac [2.4-GHz band/5-GHz band])

Other Features

Clear Image Zoom

Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (HD)

Digital Zoom

Smart zoom (Still images):35 mm full frame: M: Approx. 1.5x, S: Approx. 2x, APS-C: S: Approx. 2x,
Digital zoom (still images): 35 mm full frame: L: Approx. 4x, M: Approx. 6.1x, S: Approx. 8x, APS-C:
M: approx. 4x, S: approx. 5.2x, Digital zoom (Movie):35 mm full frame: Approx. 4x, APS-C: Approx.
4x

Face Detection

Face/Eye Priority in AF, Face Priority in Multi Metering, Regist. Faces Priority

Others

Interval Recording, ISO AUTO Min. SS, Bright Monitoring, Copyright Info, Set File Name,
Save/Import Settings, Help guide, Video Light Mode, Zoom Ring Rotate

PlayMemories Camera Apps™

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Self-Portrait Self-Timer

-

Print

Compatible Standards

Exif Print, Print Image Matching III

Image Stabilization

Compensation Effect

5.5 stops (based on CIPA standard. Pitch/yaw shake only. With Planar T* FE 50mm F1.4 ZA lens
mounted. Long exposure NR off.)

type

Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens
specifications)

Drive

Continuous Drive Speed (approx. max.)

AUTO/Electronic Shutter: Continuous shooting: Hi+: 30fps, Hi: 20fps, Mid: 15fps, Lo: 5fps,
Mechanical Shutter: Continuous shooting: Hi+: 10fps, Hi: 8fps, Mid: 6fps, Lo: 3fps

DRIVE MODES

Single Shooting, Continuous shooting (Hi+/Hi/Mid/Lo selectable), Self-timer, Self-timer (Cont.),
Bracket: Single, Bracket: Cont., White Balance bracket, DRO bracket

No. of recordable frames (approx.)

JPEG Extra fine L: 182 frames, JPEG Fine L: 400 frames, JPEG Standard L: 400 frames, RAW: 238 frames, RAW & JPG: 192 frames, RAW (Lossless Compression): 96 frames, RAW (Lossless Compression) & JPG: 83 frames, RAW (Uncompressed): 82 frames, RAW (Uncompressed) & JPG: 78 frames

Pixel Shift Multi Shooting

Yes (4 shots / 16 shots)

Self-timer

10-sec. delay / 5-s delay / 2-s delay / Continuous self-time / Bracketing self-timer

Flash Control

Control

Pre-flash TTL

External Flash Compatibility

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

Flash compensation

+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)

Flash Modes

Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless, Hi-speed sync.

Flash coverage

-

Guide No.

-

Recycling Time

-

type

-

Wireless Control

Yes (Light signal: Available with Fill-flash, Slow Sync., Hi-speed sync. / Radio signal: Available with Fill-flash, Rear Sync., Slow Sync., Hi-speed sync.)

Size & Weight

Dimensions (W x H x D)

Approx. 5.13 x 3.88 x 3.25 inches, Approx. 5.13 x 3.88 x 2.75 inches (FROM GRIP TO MONITOR),
Approx. 128.9 mm x 96.9 mm x 80.8 mm, Approx. 128.9 mm x 96.9 mm x 69.7 mm (FROM GRIP
TO MONITOR)

Weight (with battery and memory card included)

Approx. 1 lb 10.0 oz, approx. 737 g

Viewfinder

Diopter adjustment

−4.0 to +3.0 m⁻¹

Display Function

Histogram, Real-time image-adjustment display, Digital level gauge, Grid line, Focus check,
Peaking MF, Zebra, Movie marker, Emph disp dur REC

Eye Point

Approx. 25 mm from the eyepiece lens, 21 mm from the eyepiece frame at −1 m⁻¹ (CIPA standard)

Field Coverage

100%

Finder Frame Rate Selection

STD 60fps / HI 120fps / HI+ 240fps

Magnification

Approx. 0.90 x (with 50-mm lens at infinity, −1 m⁻¹)

Number of Dots

9 437 184 dots

Viewfinder Type

1.6 cm (0.64 type) electronic viewfinder (color)

Shutter

Electronic Front Curtain Shutter

Yes

Flash Sync. Speed

(Mechanical shutter), (Flash Sync. Priority) is (ON) or (AUTO): 1/400 s (35 mm full frame), 1/500 s (APS-C), (Flash Sync. Priority) is (OFF): 1/320 s (35 mm full frame), 1/400 s (APS-C), (Electrical shutter), 1/200 s (35 mm full frame), 1/250 s (APS-C)

SHUTTER SPEED

Still images, Single shot Mechanical Shutter: 1/8000 to 30 s, Bulb; AUTO: 1/32000 to 30 s, Bulb; Electronic Shutter: 1/32000 to 30 s; Still images, Continuous shooting Mechanical; Shutter: 1/8000 to 30 s; AUTO: 1/32000 to 1/2 s; Electronic Shutter: 1/32000 to 1/2 s; Movies: 1/8000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode)

Shutter Type

Mechanical shutter/Electronic shutter

Silent Shooting

Yes (ON/OFF)

type

Electronically controlled, vertical-traverse, focal-plane type

Lens

Lens mount

E-mount

Recording System

Location information Link from smartphone

Yes

Media

SD memory card, SDHC memory card (UHS-I/II-compliant), SDXC memory card (UHS-I/II-compliant), CFexpress Type A memory card

Memory Card Slot

SLOT1: Multi slot for SD (UHS-I/II-compliant) memory card/CFexpress Type A card, SLOT2: Multi slot for SD (UHS-I/II-compliant) memory card/CFexpress Type A card

Recording mode on 2 memory cards

Simult. Rec, Sort, Auto Switch Media, Copy

Audio

Microphone

Built-in, stereo

Speaker

Built-in, monaural

Playback

Modes

Single (with or without shooting information Y RGB histogram & highlight / shadow warning), Index view, Enlarged display mode (L: 21.6x, M: 14.0x, S: 10.8x), Auto Review, Image orientation, Folder selection (Date / Still / Movie), Protect, Rating, Display as Group

Photo Capture

Yes

Noise Reduction

Noise Reduction

Long exposure NR: On/Off, available at shutter speeds longer than 1 s, High ISO NR: Normal / Low / Off

Others

Operating Temperature

32 - 104 degrees F / 0 - 40 degrees C

White Balance

SHUTTER AWB LOCK

Yes (Shut. Halfway Down / Cont. Shooting / Off)

White Balance Modes

Auto / Daylight / Shade / Cloudy / Incandescent / Fluorescent / Flash / Underwater / Color Temperature (2500 to 9900K) & color filter / Custom

Lens Compensation

Setting

Peripheral Shading, Chromatic Aberration, Distortion

Custom function

type

Custom key settings, Programmable Setting (Body 3 sets / memory card 4 sets), My Dial Settings,
My Menu, Reg Cust Shoot Set